

Isokern® MAXIMUS Linear Series

Gas Fireplace and Chimney System

Installation, Operation, Maintenance and Owner's Manual

Isokern Models: 82L48, 82L60, 82L72, 82L96 & 82L120

A PRODUCT OF EARTHCORE® INDUSTRIES, LLC

IMPORTANT: This manual contains assembly rules, installation steps and guidelines, and use and maintenance instructions for Isokern MAXIMUS Linear Series gas appliances. This manual must become the property of and be reviewed by all current and future users of this product. It is the responsibility of the distributor, general contractor, and the installer of this product that the instructions in this manual are followed exactly and, further that the allowed gas log appliance used in this product be installed in strict accordance with the gas log manufacturer's listing and explicit installation and operation instructions.

INSTALLER: Leave this manual with the appliance

CONSUMER: Retain this manual for future reference

Be Sure to Read Entire Manual Before Beginning Construction.

Contents of this manual may change without prior notification.



WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warning exactly could result in serious injury, death, or property damage.

— Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

— WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Leave the building immediately.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Do not install the Isokern MAXIMUS Linear Series Gas Fireplace in a manufactured home or mobile home or recreational vehicle.

- This appliance complies with National Safety and is tested and listed to ANSI/CSA Z21.50 – 2019 as vented gas fireplaces.
- Installation must conform to local codes. Check local codes prior to installation. In the absence of local codes, installation must conform with current National Fuel Gas Code, ANSI Z223.1.



PFS Report No. F19 -161
USA: ANSI Z21.50 - 2019
ICC Report No. ESR - 4873

Issued: October 2025
Revision 002.2

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**THESE FIREPLACES ARE DESIGNED FOR USE WITH:
PROPANE (LP) OR NATURAL GAS (NG), ONLY**

THIS MANUAL CAN ONLY BE REPRODUCED IN ITS ENTIRETY

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ANSI Z21.50 LISTING LABEL

	ISOKERN LINEAR GAS FIREPLACE LISTED VENTED GAS FIREPLACE PER ANSI Z21.50 - 2019 CSA 2.22-2019	 MADE IN THE USA CHESAPEAKE, VA 23323														
PFS REPORT NO. F19 - 161	NOT FOR USE WITH SOLID FUEL	SERIAL NO: L000001														
		MODEL # ☐ 82L48 ☐ 82L72 ☐ 82L60 ☐ 82L96 ☐ 82L120														
FOR USE WITH PROPANE (LP) OR NATURAL GAS, SEE GAS IDENTIFYING TAG ON BURNER																
☐ 82L48 NATURAL GAS MAX BTU 54,000; PROPANE MAX BTU 48,000																
☐ 82L60 NATURAL GAS MAX BTU 72,000; PROPANE MAX BTU 64,000																
☐ 82L72 NATURAL GAS MAX BTU 90,000; PROPANE MAX BTU 80,000																
☐ 82L96 NATURAL GAS MAX BTU 108,000; PROPANE MAX BTU 96,000																
☐ 82L120 NATURAL GAS MAX BTU 110,000; PROPANE MAX BTU 105,000																
*See Burner Rating Plate For Additional Information																
MANIFOLD PRESSURE: PROPANE (LP): 10" WATER COLUMN; NATURAL GAS: 3.5" WATER COLUMN																
MINIMUM PERMISSIBLE GAS SUPPLY PRESSURE FOR PURPOSE OF INPUT ADJUSTMENT:																
PROPANE (LP): 11" WATER COLUMN; NATURAL GAS: 5" WATER COLUMN																
ELECTRICAL RATING: UNIT: ELECTRONIC 1 PH 60 HZ 120 VOLTS LESS THAN 5 AMPS	CLEARANCE TO COMBUSTIBLES:	<table><tr><td>Open Front Only</td><td>Glass Front Only</td></tr><tr><td>UNIT FRONT</td><td>= 0in</td></tr><tr><td>UNIT SIDES AND REAR</td><td>= 1.5in.</td></tr><tr><td>COMBUSTIBLE SHEATHING ABOVE OPENING</td><td>= 8in</td></tr><tr><td>TOP SHEATHING OR TRIM TO OPENING SIDES</td><td>= 8in</td></tr><tr><td>MANTEL ABOVE OPENING</td><td>= 12in.</td></tr><tr><td>INSULATION FROM FIREBOX</td><td>= 3in.</td></tr></table>	Open Front Only	Glass Front Only	UNIT FRONT	= 0in	UNIT SIDES AND REAR	= 1.5in.	COMBUSTIBLE SHEATHING ABOVE OPENING	= 8in	TOP SHEATHING OR TRIM TO OPENING SIDES	= 8in	MANTEL ABOVE OPENING	= 12in.	INSULATION FROM FIREBOX	= 3in.
Open Front Only	Glass Front Only															
UNIT FRONT	= 0in															
UNIT SIDES AND REAR	= 1.5in.															
COMBUSTIBLE SHEATHING ABOVE OPENING	= 8in															
TOP SHEATHING OR TRIM TO OPENING SIDES	= 8in															
MANTEL ABOVE OPENING	= 12in.															
INSULATION FROM FIREBOX	= 3in.															
CAUTION: THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES, UNLESS A CERTIFIED KIT IS USED.																
This appliance must be installed in accordance with local codes, if any. If none, follow the current ANSI Z223.1/NFPA 54 or CSA B149.1																
EARTHCORE INDUSTRIES HEADQUARTERS JACKSONVILLE, FL 32256																

The latest revision of this manual may be obtained at the Earthcore website:

<https://www.earthcore.com/installation-manuals/>



General Information

Isokern Maximus Linear Series Models 82L48, 82L60, 82L72, 82L96 and 82L120 are tested and listed by PFS-TECO Corp., USA Report No. F19 – 161 to ANSI Z21.50 - 2019. The Isokern Maximus Linear Series fireplaces are top-vented, gas only fireplaces that are listed for use only with the Isoflames Linear Burner gas appliance listed in this installation manual. These gas appliances come with a gas control valve that includes an automatic shut-off switch. The gas valve is available in a millivolt remote control pilot assembly.

The exhaust flue gases are to be vented through the top of the unit with listed 12" B-Vent piping. A minimum of eighteen feet (18') as measured vertically from the anchor plate to the chimney cap is required. Maximum chimney offset angle is forty five degrees off of vertical. Only one offset (2 elbows) allowed. Chimney must terminate vertically. The twelve-inch (12") diameter, double wall B-Venting system and a listed vent cap are not supplied but are required for proper operation of all Maximus Linear.

WARNING!!!: This gas appliance must not be connected to a chimney flue servicing a solid fuel burning appliance.

INTENDED USE STATEMENT

The Isokern Maximus Linear Series is intended to burn propane (LP) gas or natural gas (NG), only. This appliance is not intended to be used as a primary source of heat.

The Isokern Maximus Linear Series and its approved components are safe when installed according to this installation manual and when operated as recommended by the manufacturer. Unless you use Earthcore Industries, LLC approved components tested for this appliance, you may cause a fire hazard or serious injury. Before you begin the installation of this appliance, read these instructions completely.

Earthcore Industries, LLC disclaims any responsibility for the following actions:

- Modification of the appliance or any of its components.
- Use of any component part not approved by Earthcore Industries in combination with this appliance.
- Installation or operation in a manner other than instructed in this manual.
- Burning of anything (solid fuel) other than the listed gas log unit and the type of gas approved for use in this gas appliance.

The most important areas of concern with the installation of the Isokern Maximus Linear Series are clearance to combustible materials, proper assembly of component parts, load carrying capacity of underlying floor system, heights of chimney system, hearth extensions, and the techniques employed in applying finishing materials to the wall surrounding the Isokern Maximus Linear Series. Combustion air inlet kits are not required for the Isokern Maximus Linear Series, however, may help improve fireplace operation. Check local codes for combustion air requirements.

Each of these topics will be covered in detail throughout this manual. Special attention must be given to each topic as the installation progresses.

The installation of the Isokern Maximus Linear Series must conform with local codes or, in the absence of local codes, with the current National Fuel Gas Code, ANSI-Z223.1/NFPA 54 or the current Natural Gas and Propane Installation Code, CSA B149.1.

SEISMIC CODE SPECIFICATIONS

If installation of the Isokern Firebox is to be installed in an area with seismic codes, please follow these instructions. Four #4 ASTM A615 Grade 40 minimum, vertical reinforcing bars, 2 on each side of the firebox running from top of sidewalls to approximately 4 inches into the concrete slab (for anchorage).

IMPORTANT: The top plate of the firebox shall not to be used as a structural support. The top plate is not designed to be a weight / load bearing surface.

NOTE: Do not scale drawings. Illustrations in this manual are not to scale and are intended to show "typical" installations. Nominal dimensions are given for design and framing reference only. Actual installations may vary due to job specific design preferences. Always maintain the stated minimum clearances to combustible materials. Do not violate any specific installation requirements.

Safety Instructions

WARNING!!!: This product contains or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from fire, burns, explosions, or carbon monoxide poisoning.

DANGER: CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

This fireplace is a vented product and will not produce any gas leakage into your home if properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, gas leakage may occur. Propane (LP) gas and natural gas (NG) are both colorless and odorless gases. An odor-making agent is added to each of these gases to help you detect a gas leak. However, the odor added to these gases can fade and gas may be present even though no odor exists.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning resemble flu symptoms, including headaches, dizziness, or nausea. If you have these signs the fireplace may not have been installed properly, get fresh air at once! Have the fireplace inspected and serviced by a qualified service person or your gas supplier. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung diseases or anemia, people at high altitude or under the influence of alcohol. Earthcore Industries strongly recommends the use of a carbon monoxide detector/alarm device wherever gas fired appliances are in use.

All parties either involved in or associated with the installation, service and use of this fireplace must read this entire manual. Keep this manual for reference and as a guidebook to safe operation of this fireplace.

WARNING!!!: This unit is not for use with solid fuel.

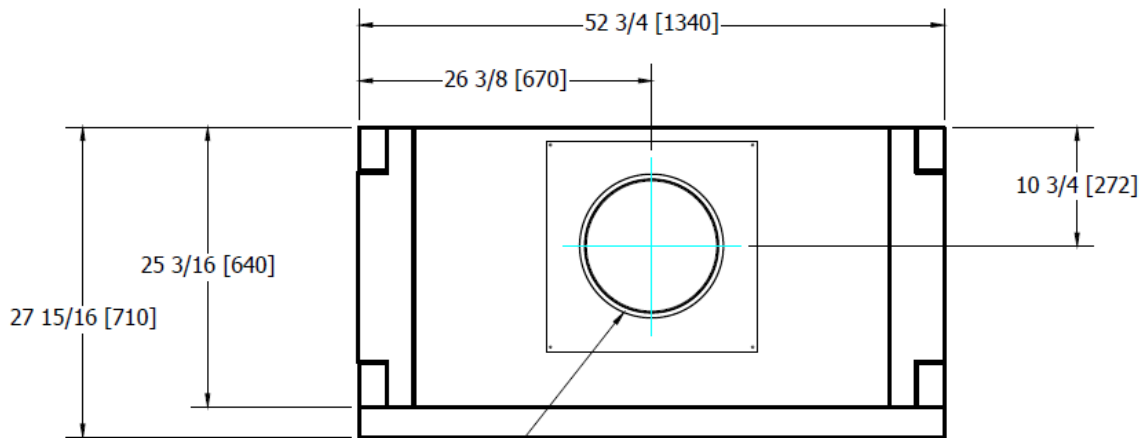
- 1) Always check local building codes governing fireplaces and fireplace installations. The Isokern Maximus Linear Series installation must comply with all local, regional, state, and national codes and regulations.
- 2) The Isokern Maximus Linear Series fireplaces are listed for use with the specific venting and burner system as detailed in this manual only.
- 3) This appliance is only for use with the type of gas indicated on the rating plate. This appliance can be field converted for use with either Propane (LP) or Natural Gas (NG). Contact your local Isokern Sales Representative for details.
- 4) For propane (LP) use do not place propane supply tank(s) inside any structure. Locate propane supply tank(s) outdoors. To prevent performance problems, do not use propane fuel tank of less than 100 lbs. capacity.
- 5) Do not install the Isokern Maximus Linear Series Gas Fireplace in a manufactured home or mobile home or recreational vehicle.
- 6) This fireplace reaches high temperature. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 7) Turn the Isokern Maximus Linear Series fireplace off and allow to cool before servicing. Always shut off any electricity and gas to the Isokern Maximus Linear Series fireplace while working on it. Only a qualified service person should install, service, or repair this fireplace. Have your fireplace inspected annually by a qualified service person.
- 8) It is imperative that the unit's control areas, burners, and circulation air passages be kept clean.
- 9) Venting system should be inspected annually by a qualified service person. If needed have venting system cleaned or repaired.
- 10) Keep all combustible material, gasoline, and other flammable liquids at a safe distance from the fireplace. Do not use the fireplace where these items are used or stored. Decorations, clothing, and other such combustible items should not be placed on the fireplace.

Safety Instructions

- 11) Do not use the Isokern Maximus Linear Series fireplace to cook food or burn paper or other objects.
- 12) Do not use any solid fuels - wood, coal, paper, cardboard, etc. - in this fireplace. Use only the gas type listed on the fireplace's burner rating plate.
- 13) Keep all unshielded insulation and vapor barriers a minimum of three inches (3") away from all Isokern Maximus Linear Series and chimney components.
- 14) Do not pack or fill required air spaces with insulation or other material. No material is allowed in these spaces.
- 15) Never install Isokern Maximus Linear Series components, chimney components, or accessories that have visible or suspected physical damage due to handling or transportation. These items should be inspected by a qualified representative to ensure safe condition. When in doubt, consult your local supplier.
- 16) Do not alter or modify the Isokern Maximus Linear Series and/or venting components under any circumstances. Modification or alteration of the venting components may void manufacturer's warranty, listings, and approvals.
- 17) Do not use a fireplace blower insert, heat exchanger or any other product not specified by the manufacturer herein for use with this fireplace.
- 18) Do not use any Isokern Maximus Linear Series appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- 19) The Isokern Maximus Linear Series is not intended to heat an entire home or to be used as a primary heat source.
- 20) Children and adults should be alerted to the hazards of high surface temperature and should stay away from this appliance to avoid burns or clothing ignition.
- 21) Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to the fireplace, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.
- 22) Clothing or flammable material should not be placed on or near the appliance.
- 23) Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 24) Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.
- 25) **Do not nail or screw any material into the Isokern fireplace, which includes firebox or smoke dome components unless specifically instructed in this manual. This may alter the integrity of the fireplace and cause a house fire. THIS WILL VOID THE WARRANTY OF THE FIREPLACE.**
- 26) Never spray or apply any type of sealer, insulation, or other materials to the fireplace.

Isokern Maximus Linear Series 48" (82L48)

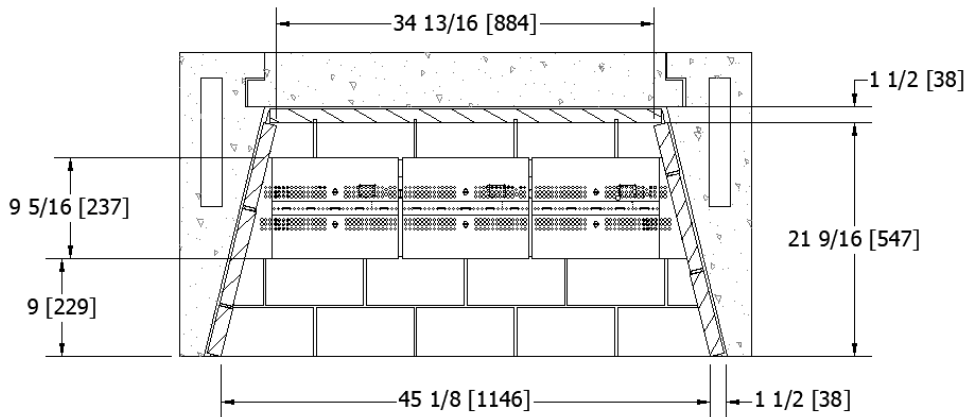
***NVT-1 and NVT-2 safety system required for natural drafting applications**



Ø345mm[13 9/16"] FLUE OUTLET.

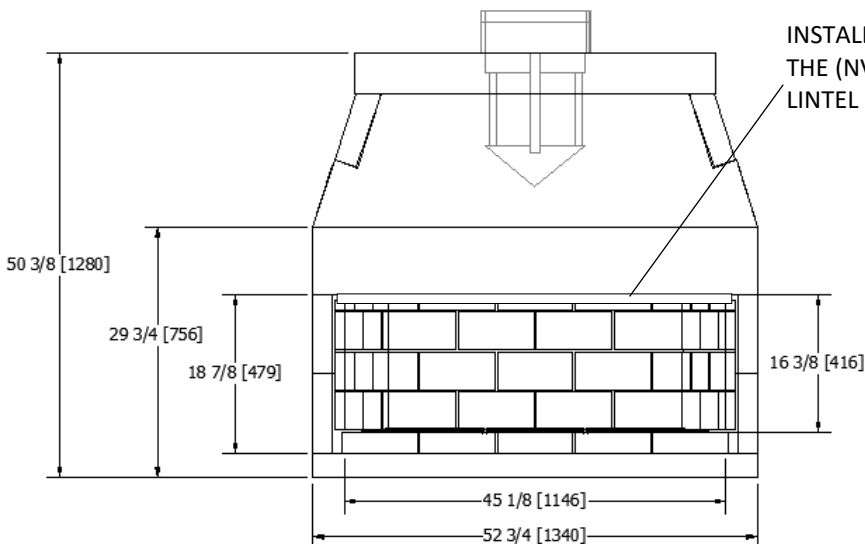
TOP VIEW

INSTALLATION SHALL USE 12" B-VENT
ANCHOR PLATE & DAMPER W/
DOWN-DRAFT DIVERTER (NVT-2).



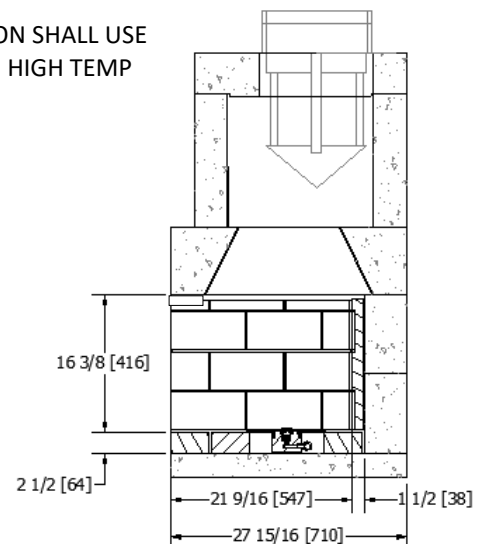
PLAN VIEW

FRONT VIEW

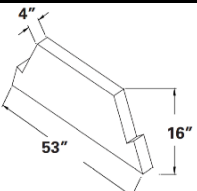
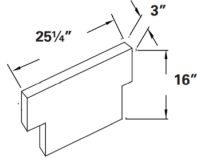
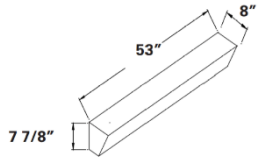
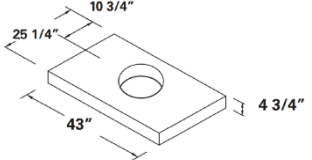


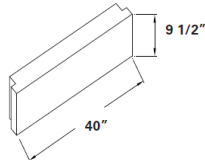
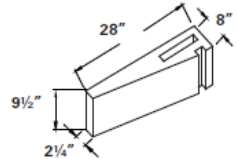
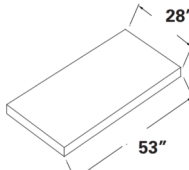
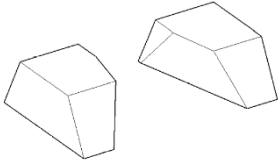
INSTALLATION SHALL USE
THE (NVT-1) HIGH TEMP
LINTEL

SIDE VIEW



Isokern Maximus Linear Series 48" Components (82L48)***NVT-1 and NVT-2 safety system required for natural drafting applications**

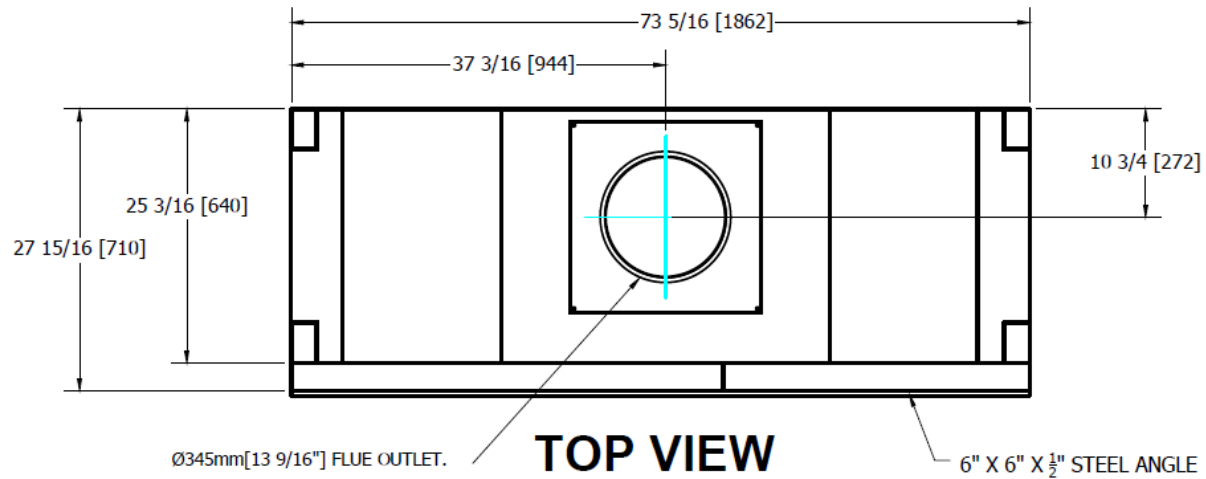
<u>Component</u>	<u>Part#</u>	<u>Description</u>
	13	Smoke Dome (Qty: 2)
	34	Smoke Dome Side Wall (Qty: 2)
	70	Damper Beam (Qty: 2)
	81	Top Plate (Qty: 1)

<u>Component</u>	<u>Part#</u>	<u>Description</u>
	M67	Backwall (Qty: 2)
	M90	Sidewall (Qty: 4)
	M93	Base Plate (Qty: 1)
	M94L & M94R	Damper End Block; Left and Right (Qty: 1 Each)

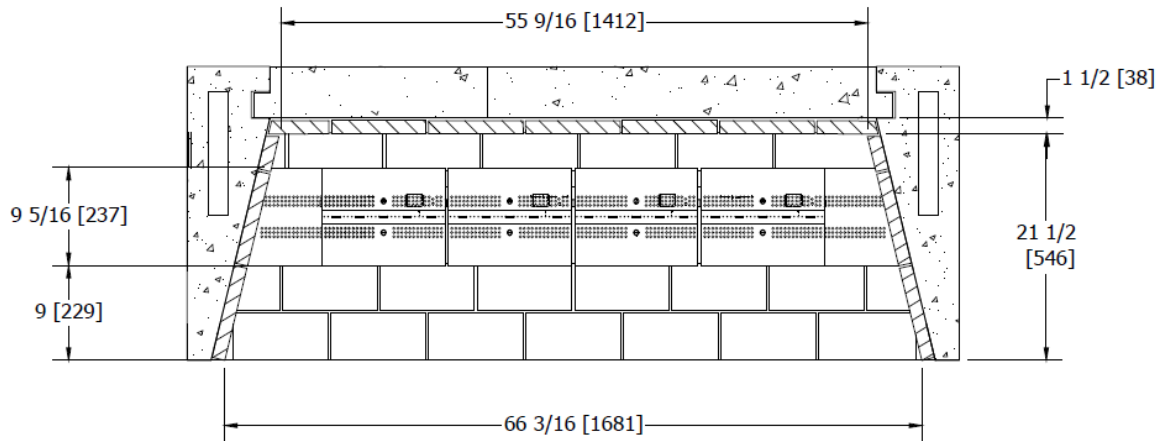
Isokern Maximus Linear Series 60" (82L60)

Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally

***NVT-1 and NVT-2 safety system required for natural drafting applications**



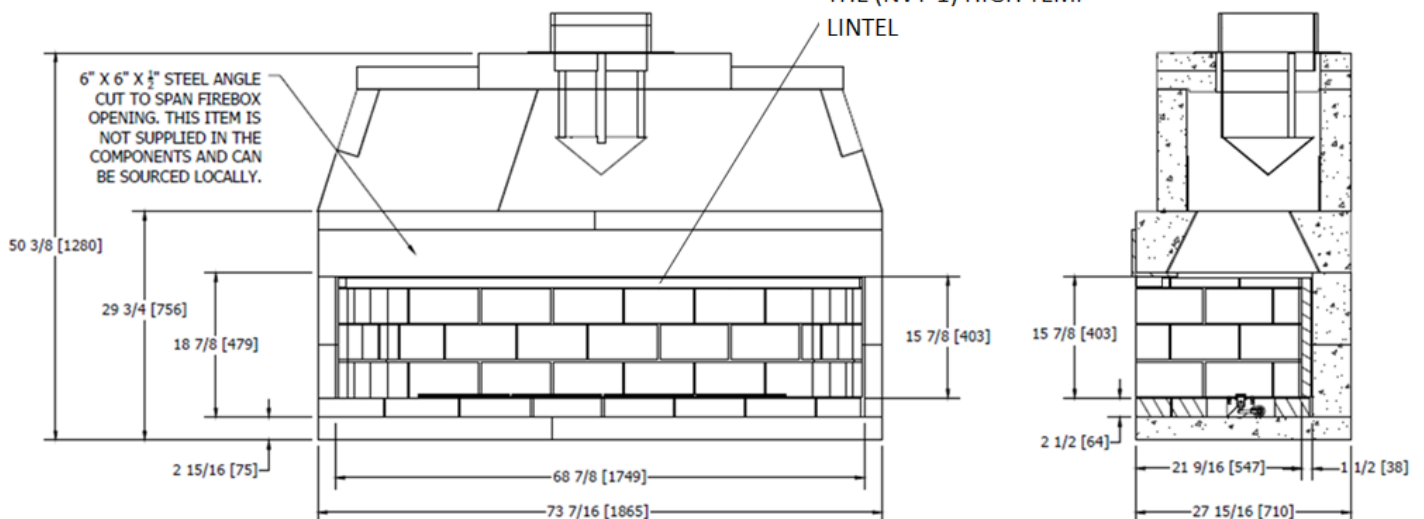
INSTALLATION SHALL USE 12" B-VENT ANCHOR PLATE & DAMPER W/ DOWN-DRAFT DIVERTER (NVT-2).



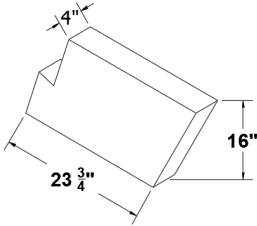
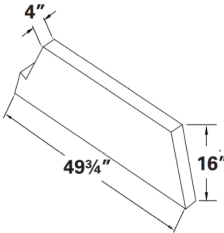
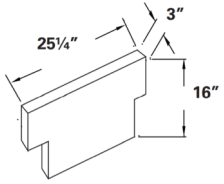
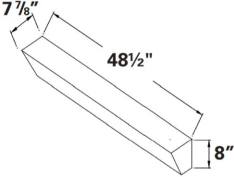
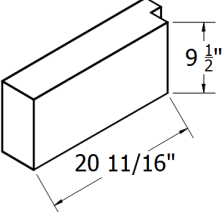
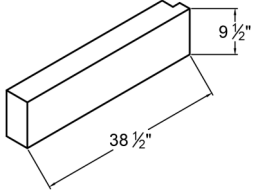
FRONT VIEW

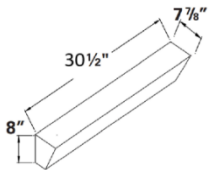
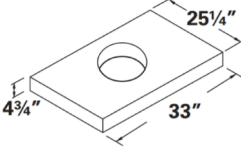
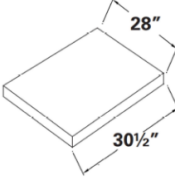
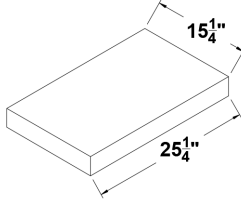
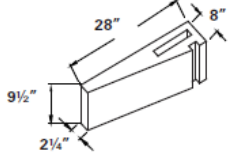
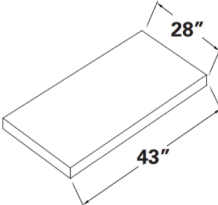
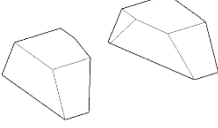
INSTALLATION SHALL USE THE (NVT-1) HIGH TEMP LINTEL

SIDE VIEW



Isokern Maximus Linear Series 60" Components (82L60)***NVT-1 and NVT-2 safety system required for natural drafting applications**

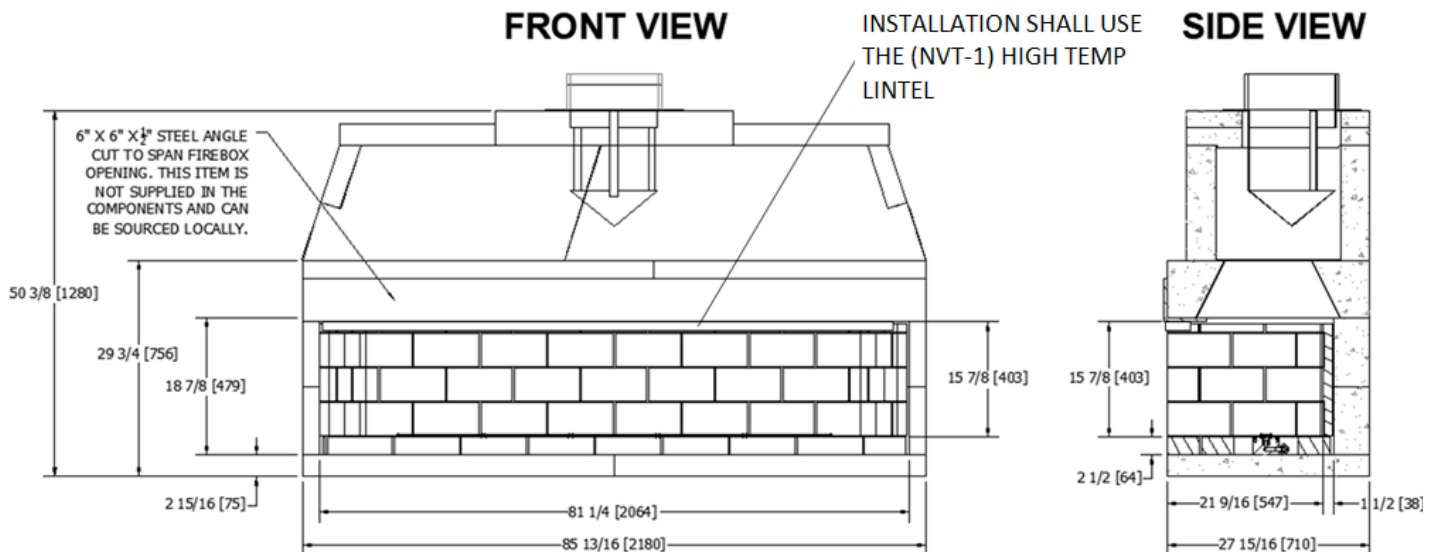
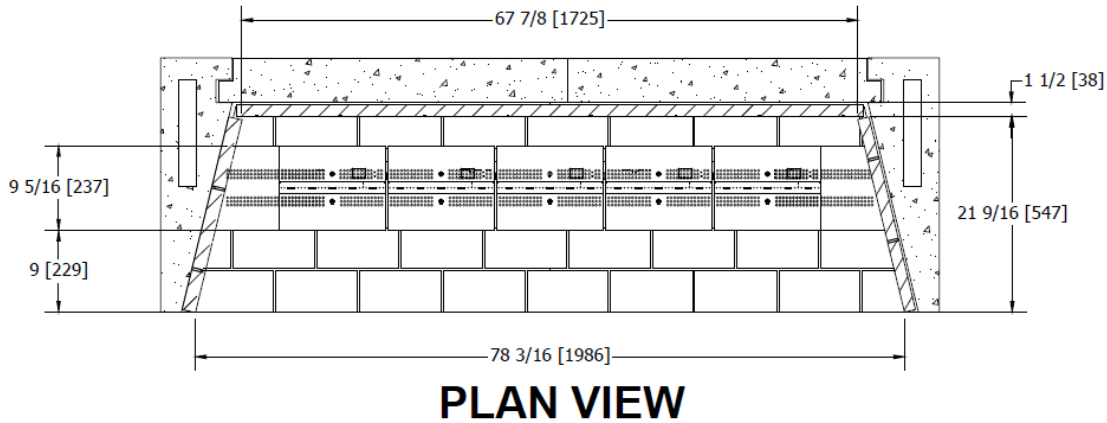
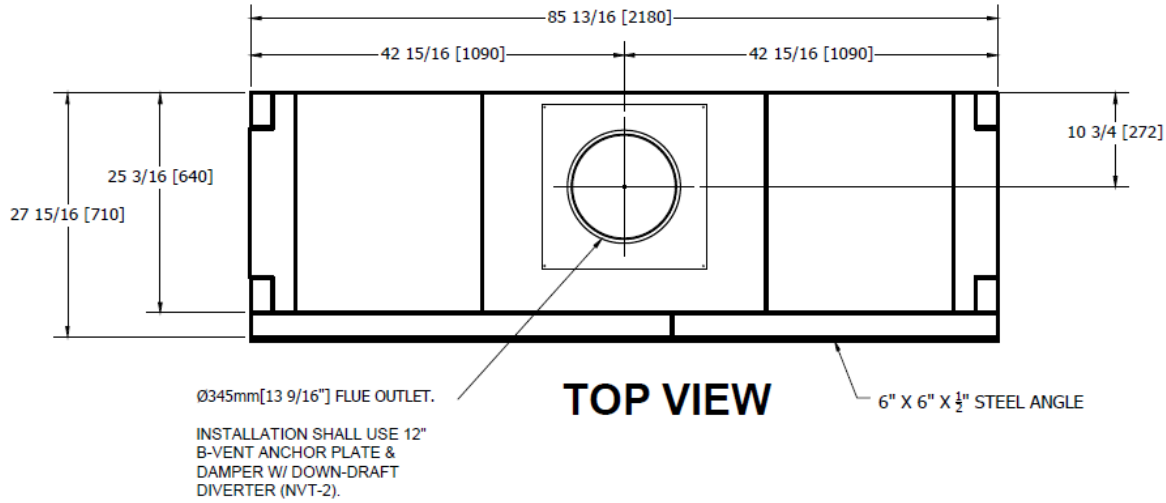
Component	Part#	Description
	15	Smoke Dome (Qty: 2)
	16	Smoke Dome (Qty: 2)
	34	Smoke Dome Side Wall (Qty: 2)
	68	Damper Beam (Qty: 2)
	71	Backwall (Qty: 2)
	72	Backwall (Qty: 2)

Component	Part#	Description
	74	Damper Beam (Qty: 2)
	77A	Top Plate (Qty: 1)
	96	Base Plate (Qty: 1)
	131	Top Plate End (Qty: 2)
	M90	Sidewall (Qty: 4)
	M91	Base Plate (Qty: 1)
	M94L & M94R	Damper End Block; Left and Right (Qty: 1 Each)

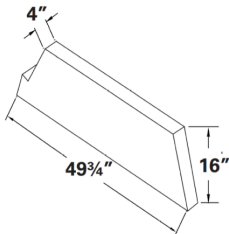
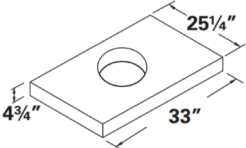
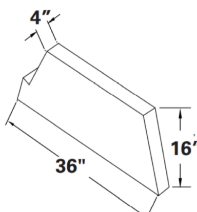
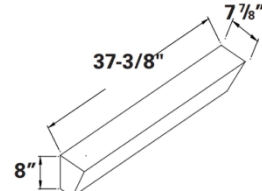
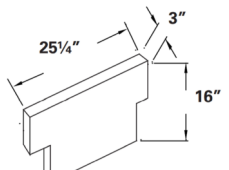
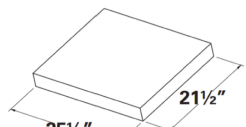
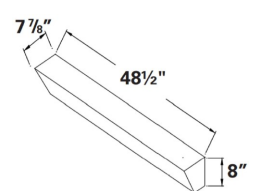
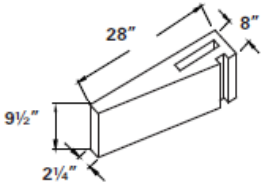
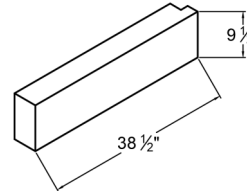
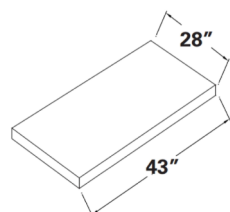
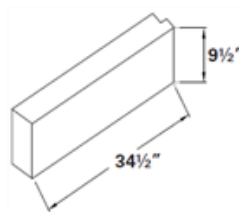
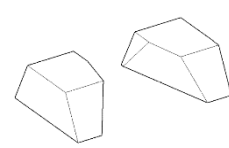
Isokern Maximus Linear Series 72" (82L72)

Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally

***NVT-1 and NVT-2 safety system required for natural drafting applications**

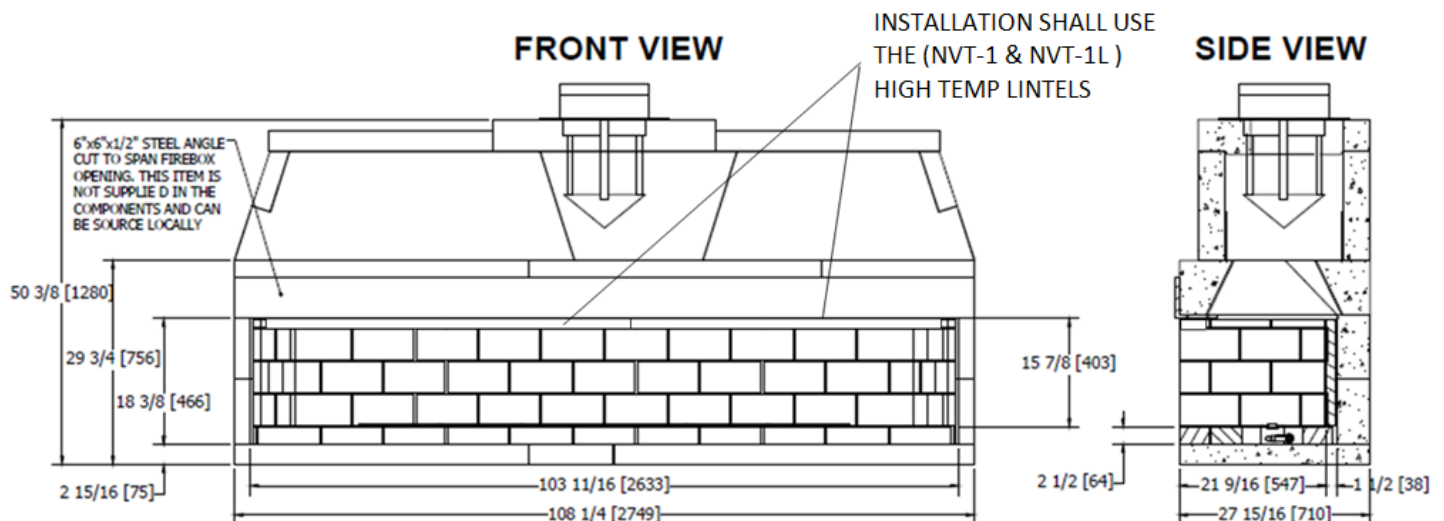
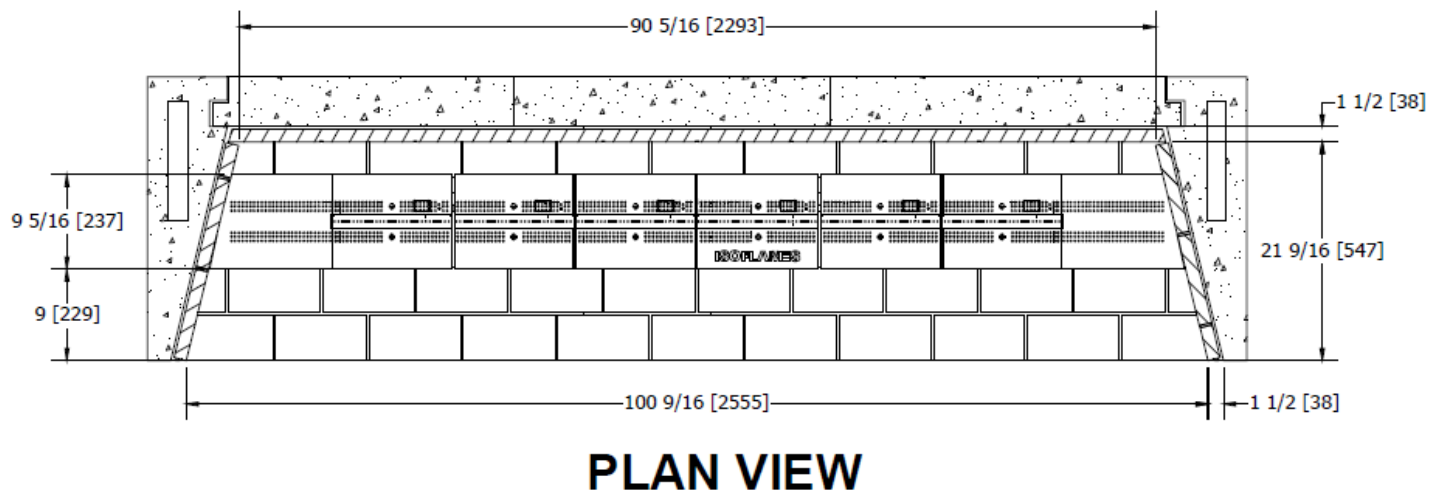
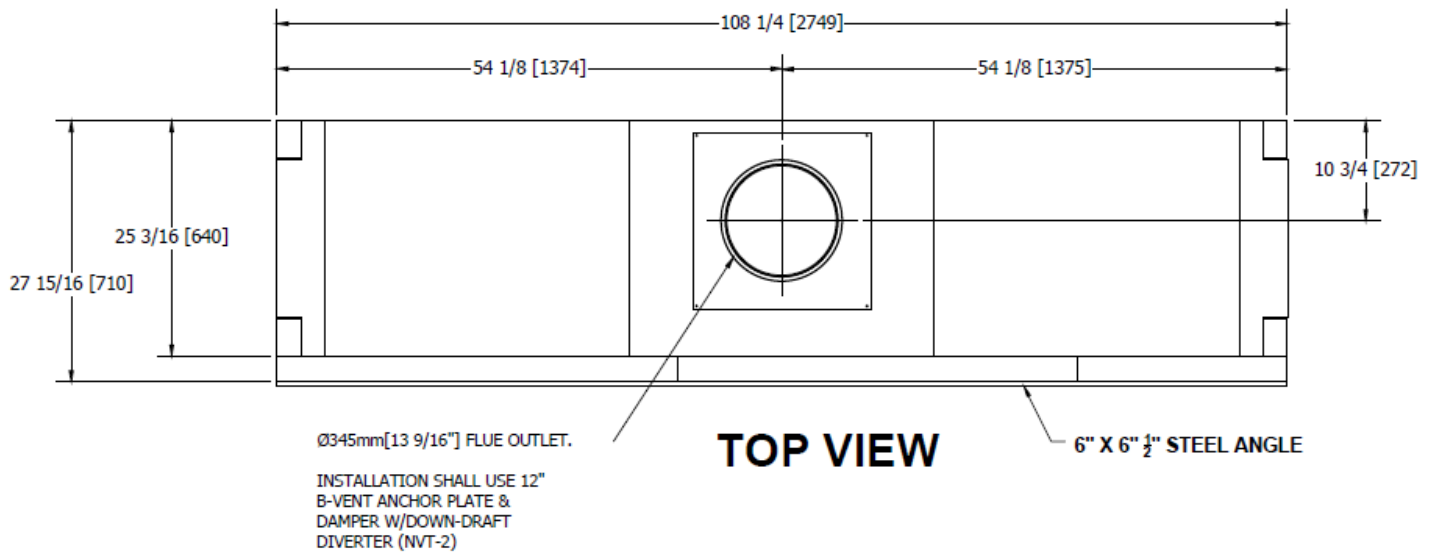


Isokern Maximus Linear Series 72" Components (82L72)**Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally*****NVT-1 and NVT-2 safety system required for natural drafting applications**

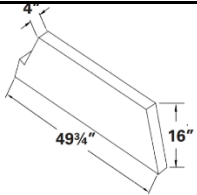
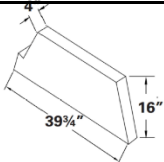
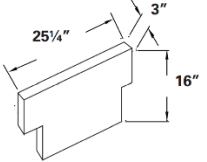
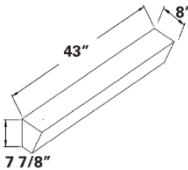
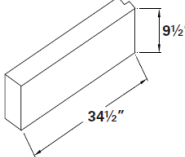
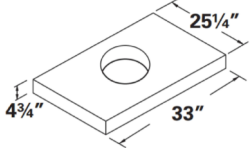
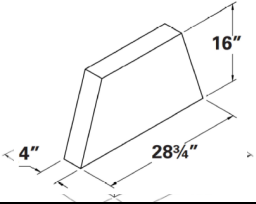
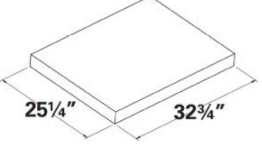
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	18	Smoke Dome (Qty: 2)		83	Damper Beam (Qty: 2)
	34	Smoke Dome Side Wall (Qty: 2)		121	Top Plate End (Qty: 2)
	69	Damper Beam (Qty: 2)		M90	Sidewall (Qty: 4)
	72	Backwall (Qty: 2)		M91	Base Plate (Qty: 2)
	73	Backwall (Qty: 2)		M94L & M94R	Magnum Damper End Block; Left and Right (Qty: 1 Each)

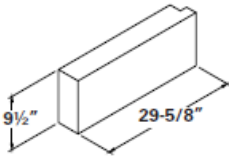
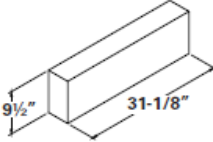
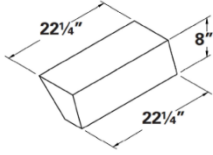
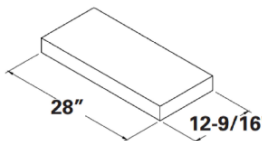
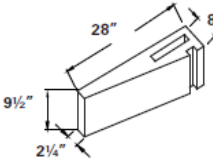
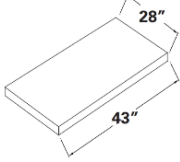
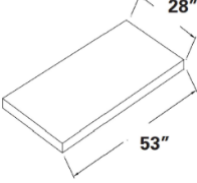
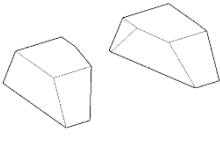
Isokern Maximus Linear Series 96" (82L96)

Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally
***NVT-1 & NVT-1L and NVT-2 safety system required for natural drafting applications**



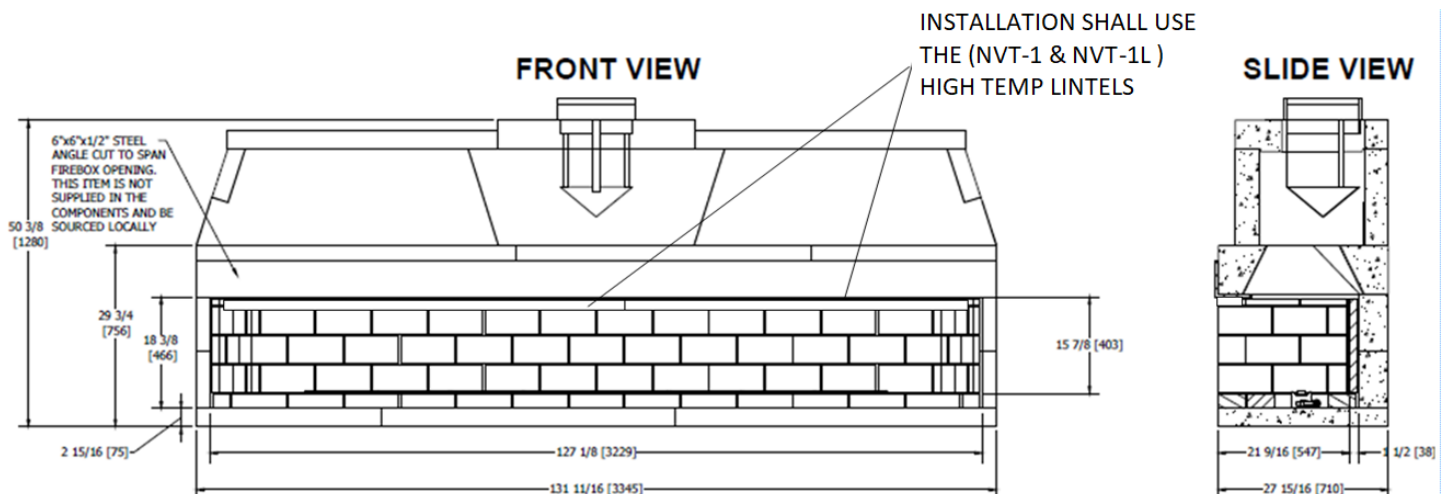
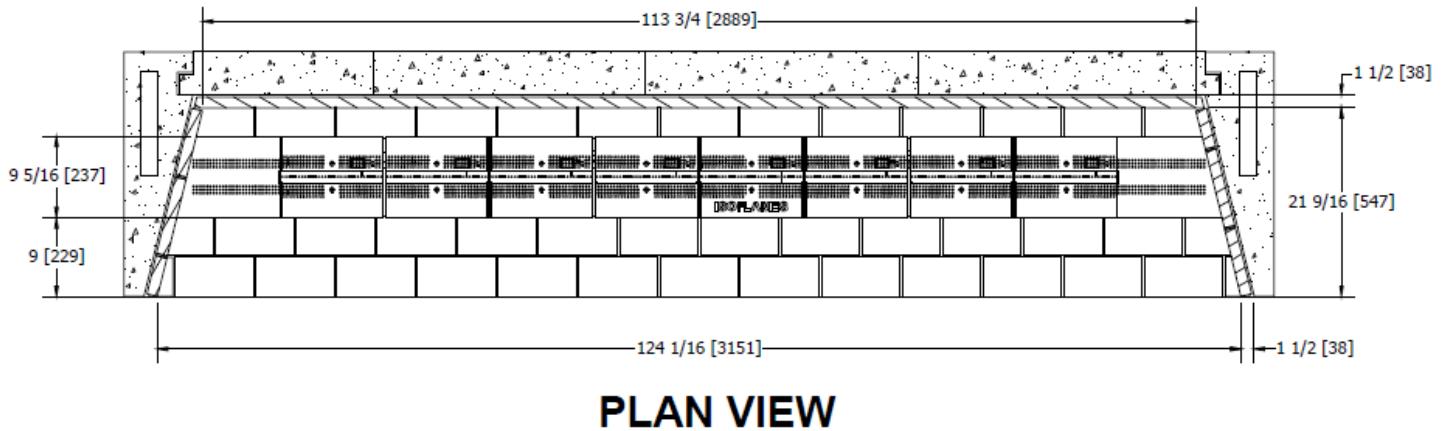
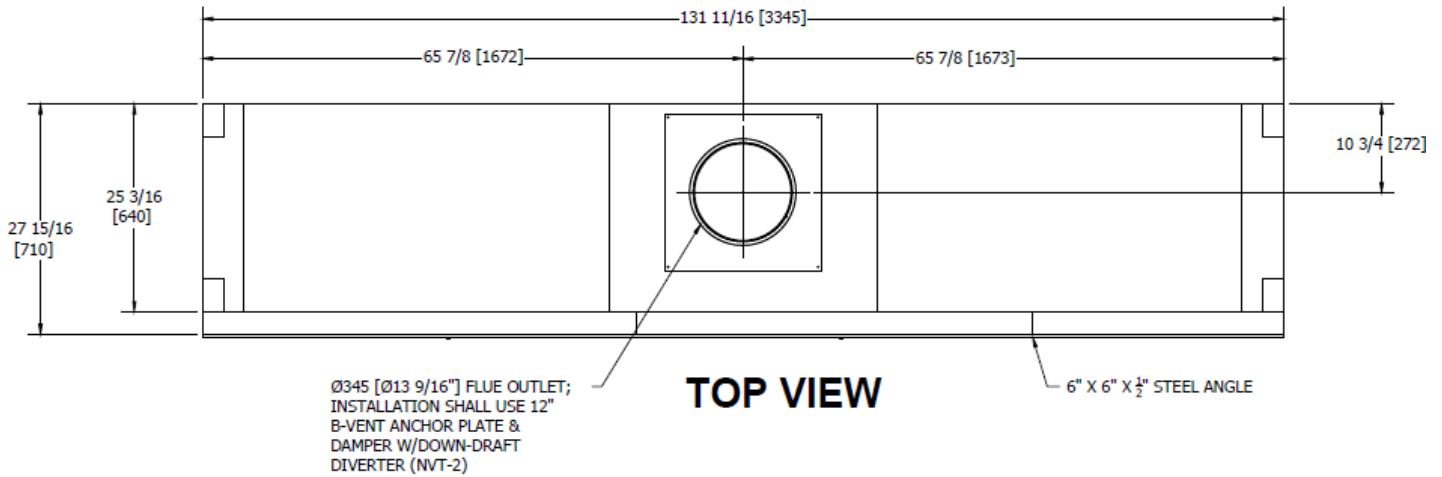
Isokern Maximus Linear Series 96" Components (82L96)**Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally*****NVT-1 & NVT-1L and NVT-2 safety system required for natural drafting applications**

Component	Part#	Description
	16	Smoke Dome (Qty: 2)
	17	Smoke Dome (Qty: 2)
	34	Smoke Dome Side Wall (Qty: 2)
	68	Damper Beam (Qty: 4)
	73	Backwall (Qty: 2)
	77A	Top Plate (Qty: 1)
	113	Smoke Dome (Qty: 2)
	122	Top Plate End (Qty: 2)

Component	Part#	Description
	160	Backwall (Qty: 2)
	162	Backwall (Qty: 2)
	167	Damper Beam (Qty: 2)
	191	Base Plate (Qty: 1)
	M90	Sidewall (Qty: 4)
	M91	Base Plate (Qty: 1)
	M93	Base Plate (Qty: 1)
	M94L & M94R	Damper End Block; Left and Right (Qty: 1 Each)

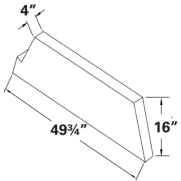
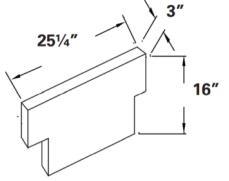
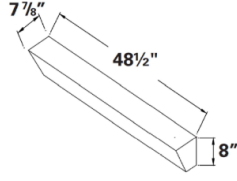
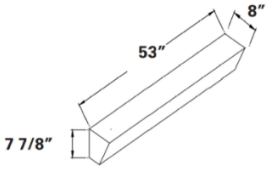
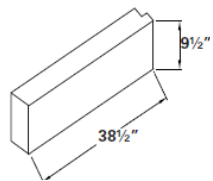
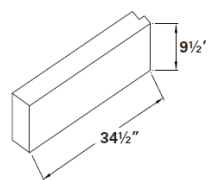
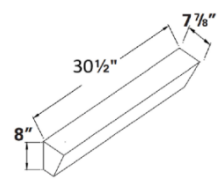
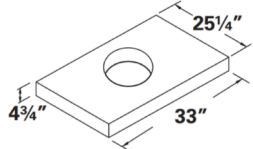
Isokern Maximus Linear Series 120" (82L120)

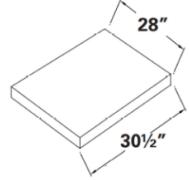
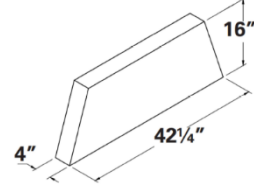
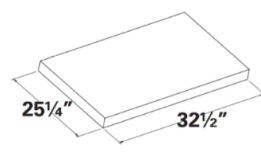
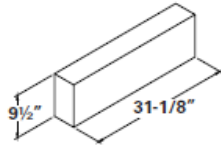
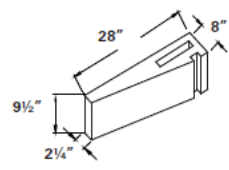
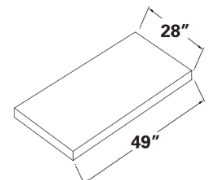
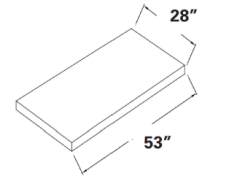
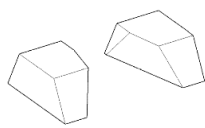
Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally
***NVT-1 & NVT-1L and NVT-2 safety system required for natural drafting applications**



Isokern Maximus Linear Series 120" Components (82L120)

Steel angle: 6" x 6" x 1/2" cut to span firebox opening. This item is not included in the components and can be sourced locally
***NVT-1 & NVT-1L and NVT-2 safety system required for natural drafting applications**

Component	Part#	Description
	16	Smoke Dome (Qty: 4)
	34	Smoke Dome Side Wall (Qty: 2)
	69	Damper Beam (Qty: 2)
	70	Damper Beam (Qty: 2)
	71	Backwall (Qty: 2)
	73	Backwall (Qty: 2)
	74	Damper Beam (Qty: 2)
	77A	Top Plate (Qty: 1)

Component	Part#	Description
	96	Base Plate (Qty: 1)
	116	Smoke Dome (Qty: 2)
	123	Top Plate End (Qty: 2)
	162	Backwall (Qty: 4)
	M90	Sidewall (Qty: 4)
	M92	Base Plate (Qty: 1)
	M93	Base Plate (Qty: 1)
	M94L & M94R	Damper End Block; Left and Right (Qty: 1 Each)

Required Clearance to Combustibles

IMPORTANT: “Combustibles” are defined as “normal construction materials” such as: wood framing materials, particle board, mill board, plywood paneling, plywood sub-flooring and wood flooring.

The Maximus Linear Series fireplaces and chimney systems are tested and listed for installation with “clearance to combustibles” as follows:

- Zero-inch (0”) clearance to the combustible floor; (Isokern Base Plate must be used)
- Eight-inch (8”) clearance to combustible sheathing/ trim at opening top and sides.
- Zero-inch (0”) clearance to combustible trim at the Isokern smoke dome front.
- One- and one-half inches (1-1/2”) clearance at the sides of the Isokern firebox and smoke dome sides.
- One-inch (1”) minimum air space to combustibles at all B-Vent double wall chimney components’ outer layer.

WARNING!!!: When installing directly on carpet, tile, or other combustible material other than wood flooring, the appliance should be installed on a metal or wood panel extending the full width and depth of the appliance.

IMPORTANT: When installing on a combustible floor system the area in front of the fireplace must be covered with a non-combustible hearth extension that is set tight against the fireplace front. The hearth extension shall extend at least twenty inches (20”) beyond the finished front, and at least twelve inches (12”) beyond the finished sides of the fireplace opening.

CAUTION: Maintain three inches (3”) clearance to insulation and vapor barriers from all firebox, smoke dome, and B-Vent flue components.

EXCEPTION: If insulation is used in walls surrounding the fireplace, insulation may be installed behind sheathing of gypsum board, plywood, particle board, or other rigid fire rated material on the side facing the Isokern. The facing material cannot be within 1-1/2” to the fireplace sidewalls.

NOTES:

1. The fireplaces must sit upon a floor support designed to bear the total installed weight of the fireplace.
2. All Maximus Linear installations will result in the minimum finished fire brick floor of the firebox being at least five- and one-half inches (5-1/2”) above the combustible floor system. **Never place a Maximus Linear on a combustible floor without the base plate!!!**

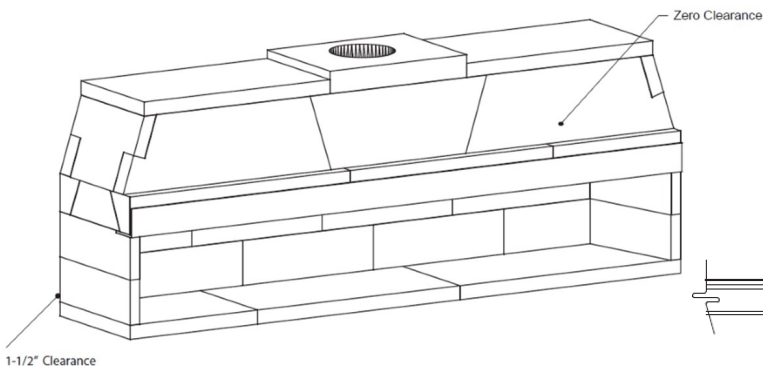


FIGURE 1

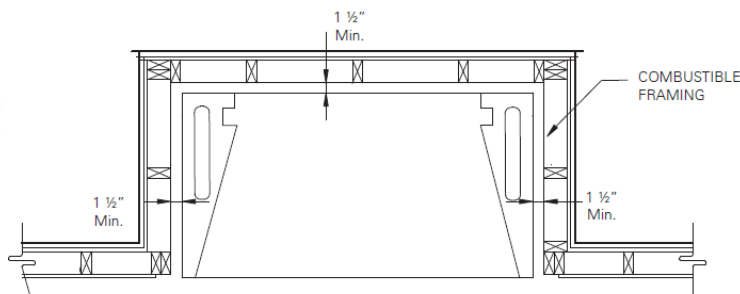


FIGURE 2

Required Clearance to Combustibles

Floor framing for Maximus Linear installation will need to be designed and built to accept substantial dead loads spread over a relatively small floor area. **(Figure 3)**

The following weights and sizes can be used to calculate loading. It is the contractor's responsibility to provide adequate floor system load capacity.

WEIGHTS AND LOAD CALCULATIONS

Total dead load amounts include (but are not necessarily limited to) the following items and their corresponding weight estimates as listed below:

1. Isokern unit weights:
 - a) Maximus Linear - 48: 1,275 lbs. (no burner, flue, or accessories)
 - b) Maximus Linear - 60: 1,720 lbs. (includes steel angle; but no burner, flue, or accessories)
 - c) Maximus Linear - 72: 1,990 lbs. (includes steel angle; but no burner, flue, or accessories)
 - d) Maximus Linear - 96: 2,450 lbs. (includes steel angle; but no burner, flue, or accessories)
 - e) Maximus Linear - 120: 2,997 lbs. (includes steel angle; but no burner, flue, or accessories)
2. Approximate weight of glass media: 100 lbs.
3. Fire brick and Adhesive: 350 lbs. - 1800 lbs. depending on brick size and pattern
4. Facing material: per general contractor
5. B-Vent metal flue: per manufacturer and installation requirements

The floor area for each model is as follows:

- Maximus Linear - 48: @ 53" x 28" = 10.3 sq. ft.
- Maximus Linear - 60: @ 73-1/2" x 28" = 14.3 sq. ft.
- Maximus Linear - 72: @ 85-3/4" x 28" = 16.67 sq. ft.
- Maximus Linear - 96: @ 108-1/4" x 28" = 21.04 sq. ft.
- Maximus Linear - 120: @ 131-3/4" x 28" = 25.62 sq. ft.

Earthcore is not responsible for structural floor support details for this fireplace system. Unless otherwise noted all floor framing drawings in this manual are merely illustrations to indicate the presence of an underlying floor system. Consult your local structural engineer for proper floor system design, sizing, and specifications.

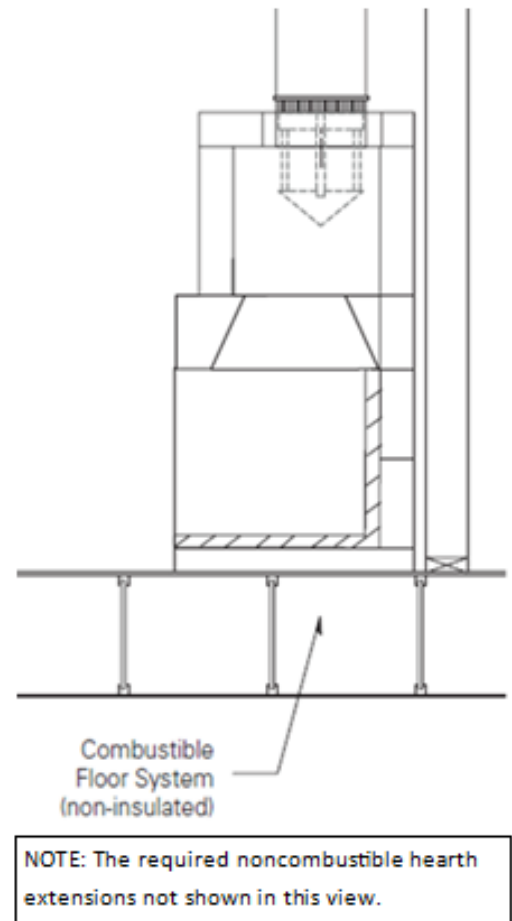
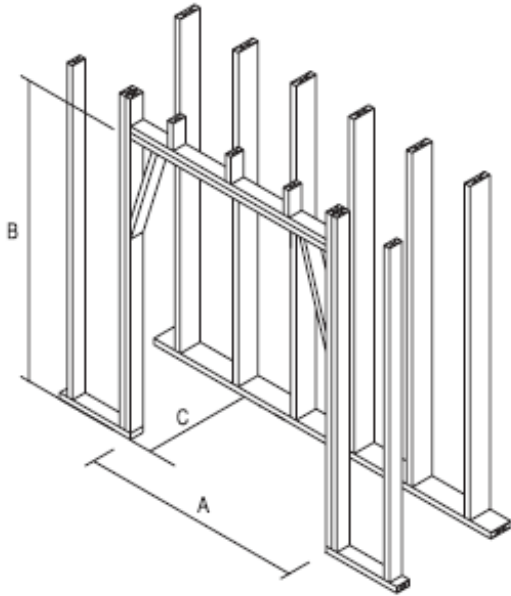


FIGURE 3

Rough Framing Dimensions

FIGURE 4



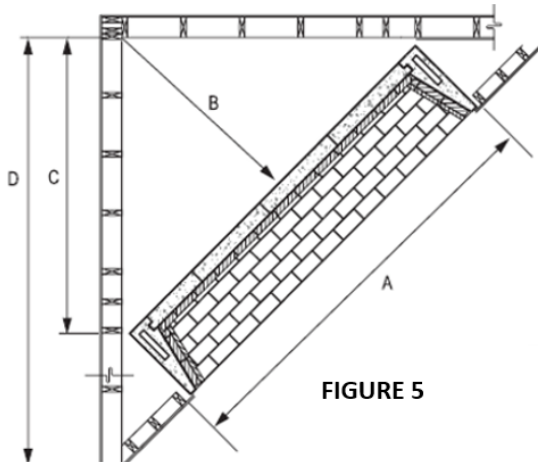
TYPICAL INSTALLATION FRAMING DIMENSIONS

Model #	A - Width	B - Height	C - Depth
82L48	56"	51"	29-1/2"
82L60	77"	51"	29-1/2"
82L72	89"	51"	29-1/2"
82L96	112"	51"	29-1/2"
82L120	135"	51"	29-1/2"

NOTES:

- 1) "B" includes the required 3" thick base plate.
- 2) If the Maximus Linear installation is to be elevated, this "Raised hearth" installation will require additional rough opening height at "B" that is equal to the height of the raised hearth.
- 3) Rough framing dimension for depth "C" allows for the required 1-1/2" clearance at the back of the fireplace. Note that this 29-1/2" is typically used on interior walls that do not have insulation present.

IMPORTANT: Unless the insulation on an exterior wall is installed behind plywood sheathing, a depth of 31" is often used to account for the required 3" clearance to insulation. Even with this increased distance, the installer should be aware that spray foam insulation may expand past the face of the stud wall and will require trimming prior to firebox installation to maintain the required 3" clearance. It is important that any insulation that is not installed behind sheathing shall be installed in such a manner that it cannot fall on the firebox and encroach on this clearance. (Figure 4)



CORNER INSTALLATION FRAMING DIMENSION

The following chart of dimensions detail the positioning of a Linear Series fireplace in a corner. (Figure 5)

CORNER INSTALLATION FRAMING DIMENSIONS

Model #	A	B	C	D
82L48	56"	29-1/2"	39"	80"
82L60	77"	38-3/4"	53-1/2"	94-1/2"
82L72	89"	45"	62-1/2"	103-1/2"
82L96	112"	56-1/2"	78"	119"
82L120	135"	68"	95"	136"

RAISED HEARTH INSTALLATION OPTION: If the design preference is for a raised hearth (floor of the fireplace elevated above the room's floor), the base plate can be set on a platform that is built up to the desired raised hearth height. When calculating raised hearth height, be sure to allow for the 3"-thick base plate plus the 2-1/2" thick fire brick floor in addition to the height of the platform. The platform shall be designed to accommodate the full weight of the firebox, venting, and accessories.

For all "raised hearth" construction - even where concrete blocks are used to create the raised platform, it is still mandatory to use the Isokern base plate. Be sure to Earthcore Adhesive the concrete block platform together. All CMU used for base plate support should be rated ASTM 90.

IMPORTANT: Whether a traditional hearth or a raised hearth is installed, the combustible floor in front of the fireplace must be covered with a noncombustible hearth extension set tight against the fireplace front and extending at least 20" out from the finished fireplace's front and at least 12" beyond the sides of the fireplace opening.

General Assembly Instructions

When beginning the assembly process, mix the Earthcore Adhesive with clean water to a smooth, workable texture (without lumps or dry pockets) of a “toothpaste” consistency. This mixture is suitable for application onto Isokern components by using a masonry grout bag supplied with the unit.

Attention should be paid that the Earthcore Adhesive mixture is not too thin or runny, as this will not allow the Earthcore Adhesive to reach its maximum bonding strength.

Mark out the position of the base plate on the supporting floor system. Apply a thin layer of Earthcore Adhesive to the area and set base plate in the adhesive (**Figure 6**).

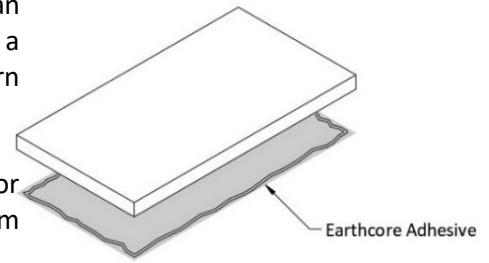


FIGURE 6

Earthcore Adhesive is then squeezed from a grout bag onto the contact surfaces of the Isokern components as they are fitted together.

NOTE: It is important that a ½” bead of Earthcore Adhesive is piped onto all the components’ contact surfaces, about ½” in from all edges (**Figure 7**).

When setting the next component onto the Earthcore Adhesive contact surface of the base plate, some Earthcore Adhesive should squeeze out along the face of the entire joint as a sign of complete and proper sealing of the joint.

On broader contact surfaces, it is advisable to apply several additional ½” beads of the Earthcore Adhesive to the area to assure proper sealing of the joint.

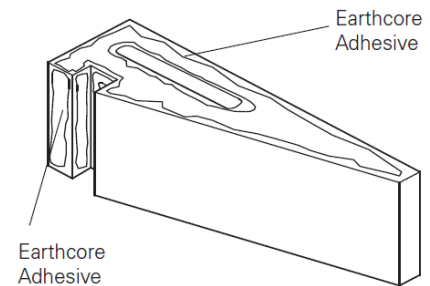


FIGURE 7

Proper firebox and smoke dome assembly requires approximately 100 pounds (dry measure) of Earthcore Adhesive.

LEVELING AND ALIGNING COMPONENTS:

Be sure to assemble all Isokern components level and flush with adjoining components.

Earthcore Adhesive is not intended to create a joint of any thickness for leveling purposes. Leveling and alignment adjustments are accomplished with the use of small plastic shims supplied with the unit (**Figure 8**).

The shims may be inserted under a component to level and align it with adjacent Isokern components. Be sure to re-grout all gaps resulting from shim insertion to maintain components to full bearing.

BROKEN COMPONENTS:

- Components can be repaired by using Earthcore Adhesive along the break line as the component is set into place.
- Components broken into multiple small pieces should be discarded and replaced.

IMPORTANT:

- Do not mix Earthcore Adhesive with anti-freeze agents.
- The maximum recommended Earthcore Adhesive joint thickness between Isokern components is ¼”.

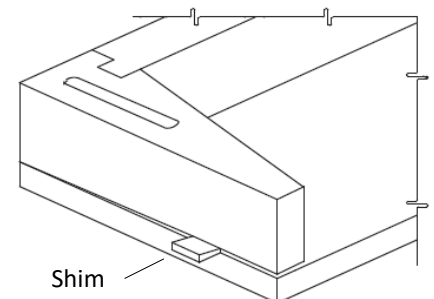


FIGURE 8

Isokern Maximus Linear Installation

The following assembly instructions identify the parts by name, part number, and illustrate the placement of each part in the assembly process for the Maximus Linear Fireplace.

NOTE: At all component joints, be sure to mortar all contact surfaces with Earthcore Adhesive. Check for complete sealing of each contact joint as the firebox assembly progresses.

- 1) Apply Earthcore Adhesive to the joints between each baseplate part and ensure to set each base plate in a full bed of Earthcore Adhesive on a level support surface (**Figure 9**). See page 17 for information regarding the supporting floor system. Do not set the base plate so that it is in span. Refer to pages 6-15 for part and assembled firebox dimensions.

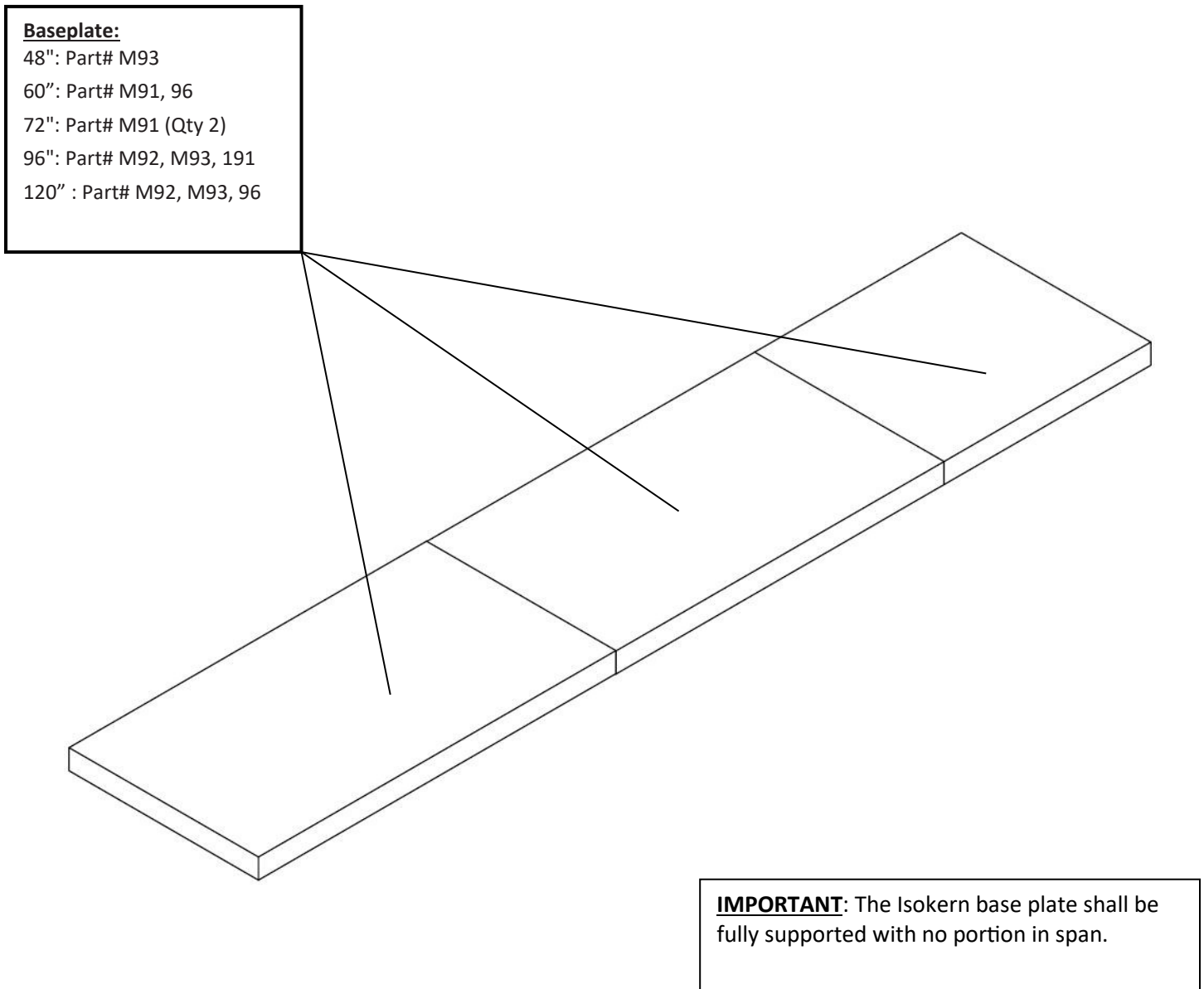


FIGURE 9

Isokern Maximus Linear Installation

- 2) Set the first course of the firebox side walls and back walls into place (**Figure 10**).

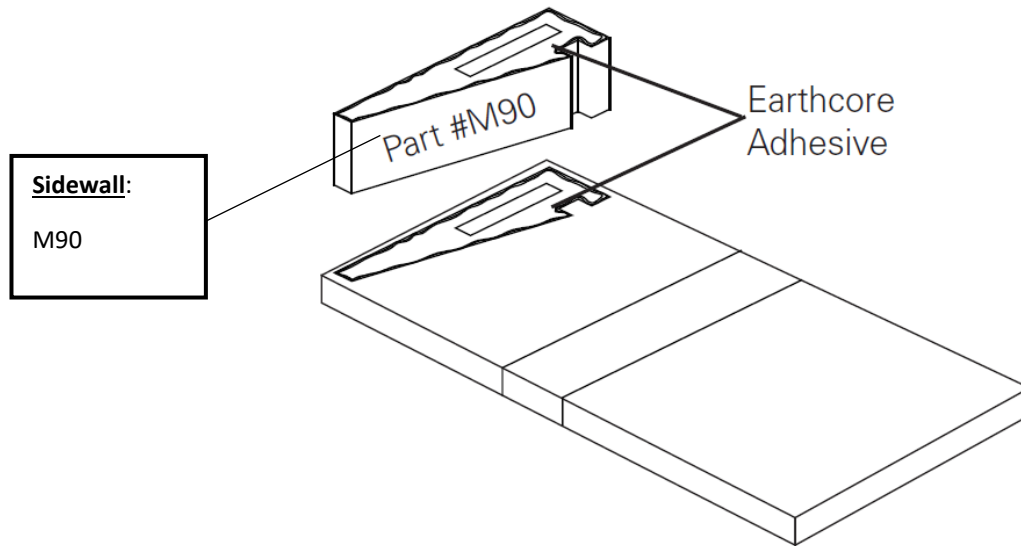


FIGURE 10

NOTE: It may be convenient to dry set the first course of side walls in place atop the Isokern base plate and trace their position onto the base plate. After outlining the dry set pieces, remove them and apply Earthcore Adhesive to the areas traced on the base plate where the side walls are to sit. By doing this, the first layer of wall components can be set directly into Earthcore Adhesive already applied to the proper areas on the base plate.

- 3) Continue assembly of the consecutive courses of the firebox side walls, **making sure to stagger the back wall components so that the vertical joints do not align**. Apply Earthcore Adhesive to the top of each layer of side wall and back wall components before setting the next course in place (**Figure 11**). Look for some Earthcore Adhesive to squeeze out along the joints of all contact surfaces as a sign that the joint is thoroughly sealed with the approved Earthcore Adhesive.

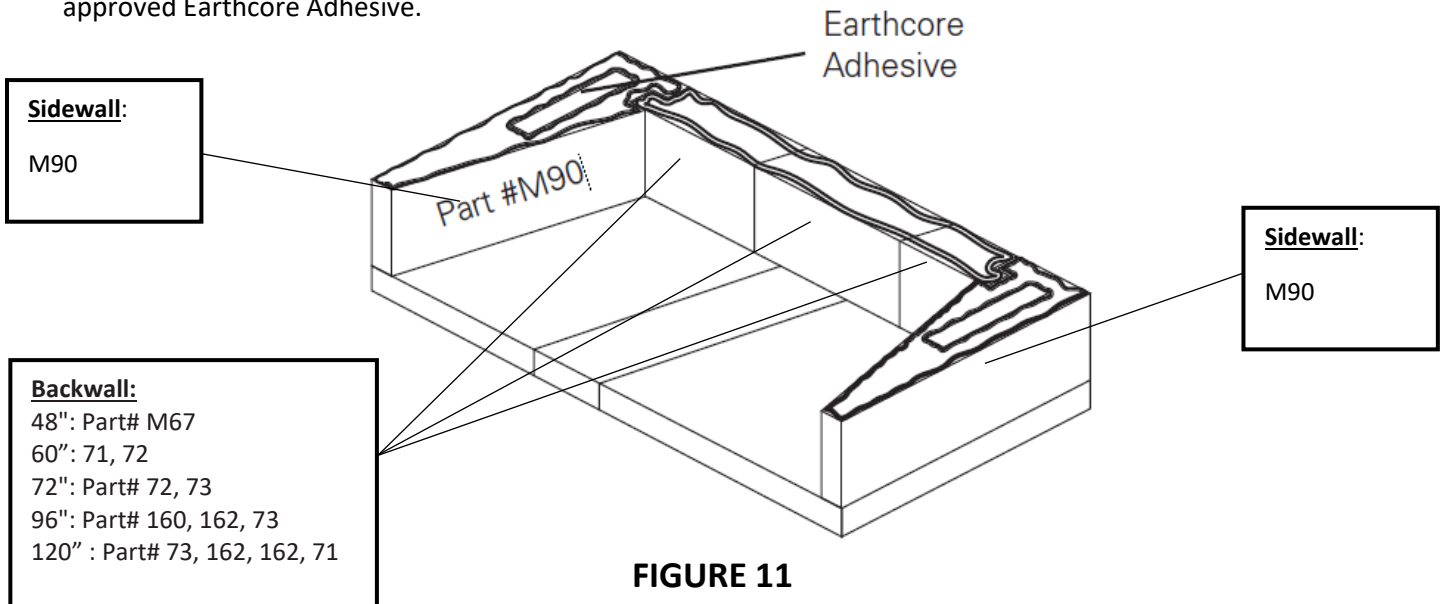


FIGURE 11

- 4) When all the firebox side wall and back wall components are set, check the top surface of the firebox for level. If necessary, adjust the top surface of the box assembly for level by inserting a shim supplied with the unit between the lowest wall component and the top surface of the base plate. Any gap created under the wall components during the shim leveling process must be filled with Earthcore Adhesive.

Isokern Maximus Linear Installation

- 5) Steel angle iron with measurements of **6" x 6" x 1/2"** that is cut to span the width of the firebox will be needed to assemble the 60", 72", 96", and 120" fireboxes (not required for the 48" model).

It is necessary to cut two 1/2" deep recesses to properly seat the angle iron. These recesses shall begin at the front of the top sidewall components and extend 5 1/2" towards the center of the firebox. These notches ensure that the angle iron is level and flush with the top of the side wall components.

When properly installed, the angle iron will protrude 1/2" beyond the front edge of the side wall components (**Figure 12**).

NOTE: It is not necessary to apply Earthcore Adhesive between angle and Isokern sidewall components.

NOTE: The steel angle should not be longer than the width of the firebox.

NOTE: Angle iron is not included but required for installation.

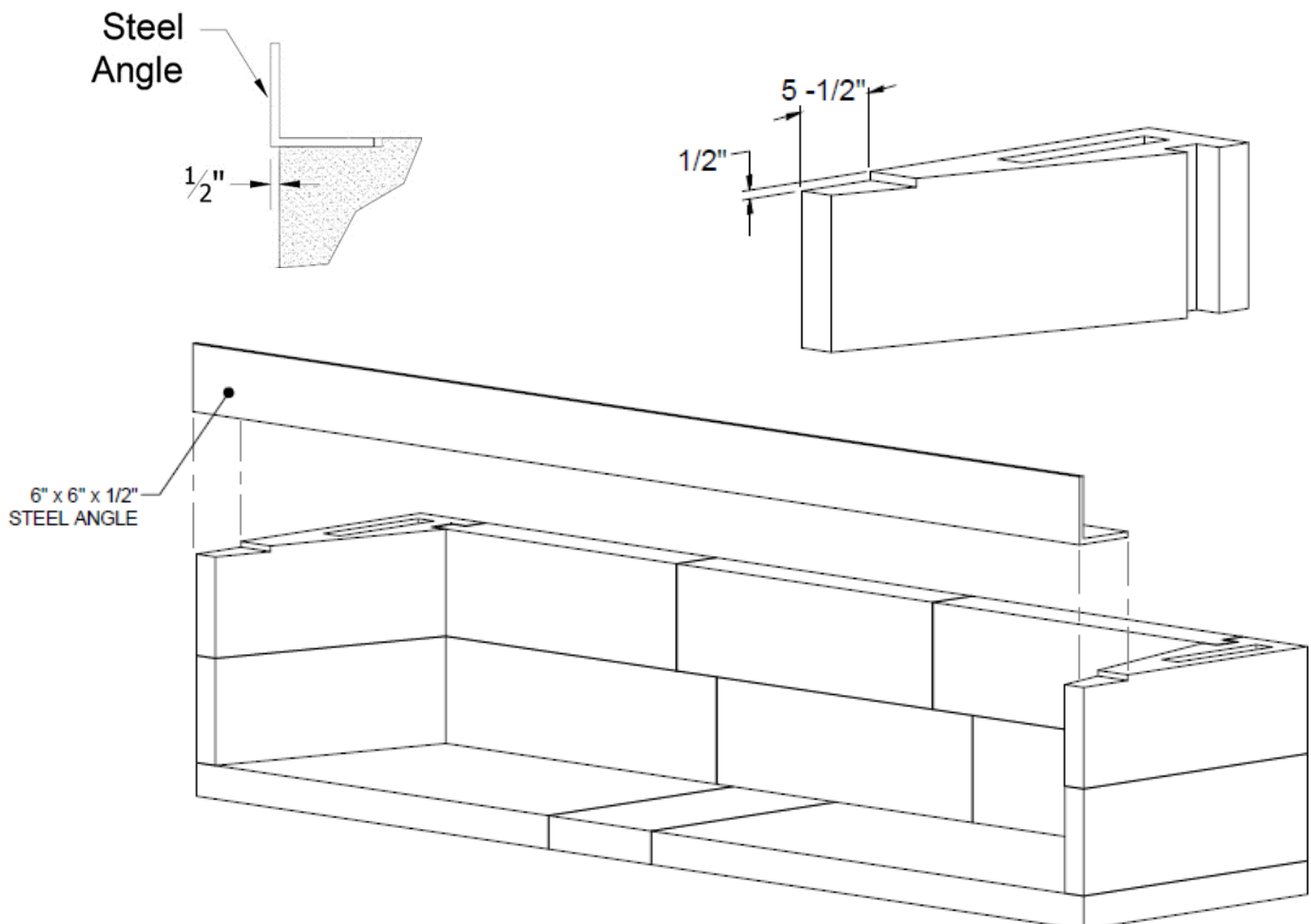


FIGURE 12

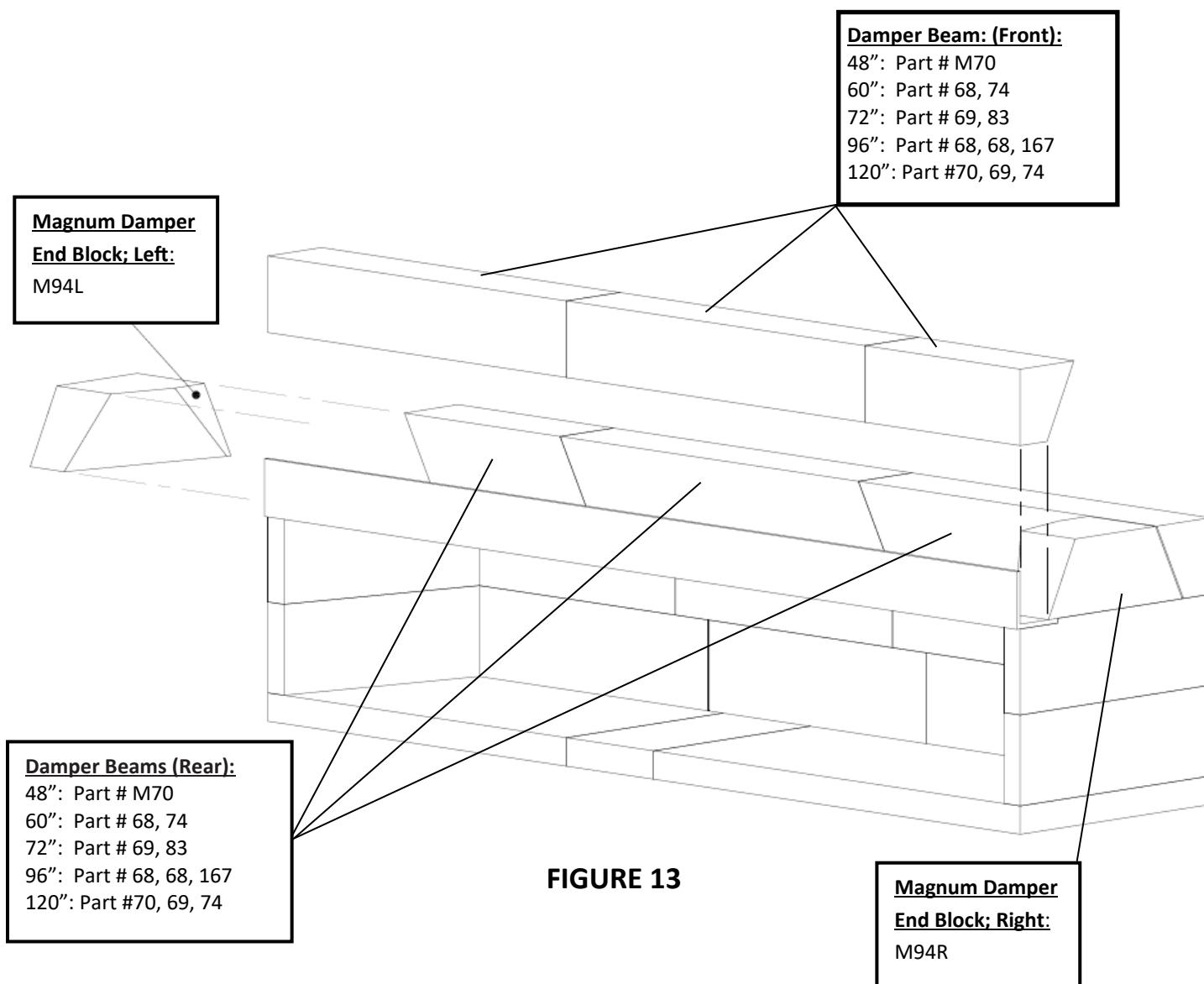
Isokern Maximus Linear Installation

- 6) The fireplaces come with an 8"-thick damper beam assembly, a component group that is to be assembled on top of the firebox side walls, back walls, and steel angle iron (no steel angle iron in 48" model). The damper beam assembly consists of long lintel pieces and two (2) short damper end blocks. The lintels will be equal to the width of the fireplace model that they serve. These components both sit on their narrow base so that their beveled face points down and into the firebox interior (**Figure 13**).

The damper end blocks are designed to sit on the firebox side wall between the front lintel and the back lintel. Each of the damper end blocks are designed for a specific side of the unit. When properly set, the vertical face of each damper end block will be flush with the outside face of the firebox side wall. Be sure to keep the wide end of the damper end block towards the rear damper beam. (**Figure 13**).

Begin by setting the rear Damper Beam components into place. Next, set the Damper End Blocks into place atop the sidewalls in a bed of Earthcore Adhesive. Be sure to apply Earthcore Adhesive to the contact surfaces of each Damper End Block component where it will meet the front and back damper beam lintel components. Next, set the front Damper Beams into place.

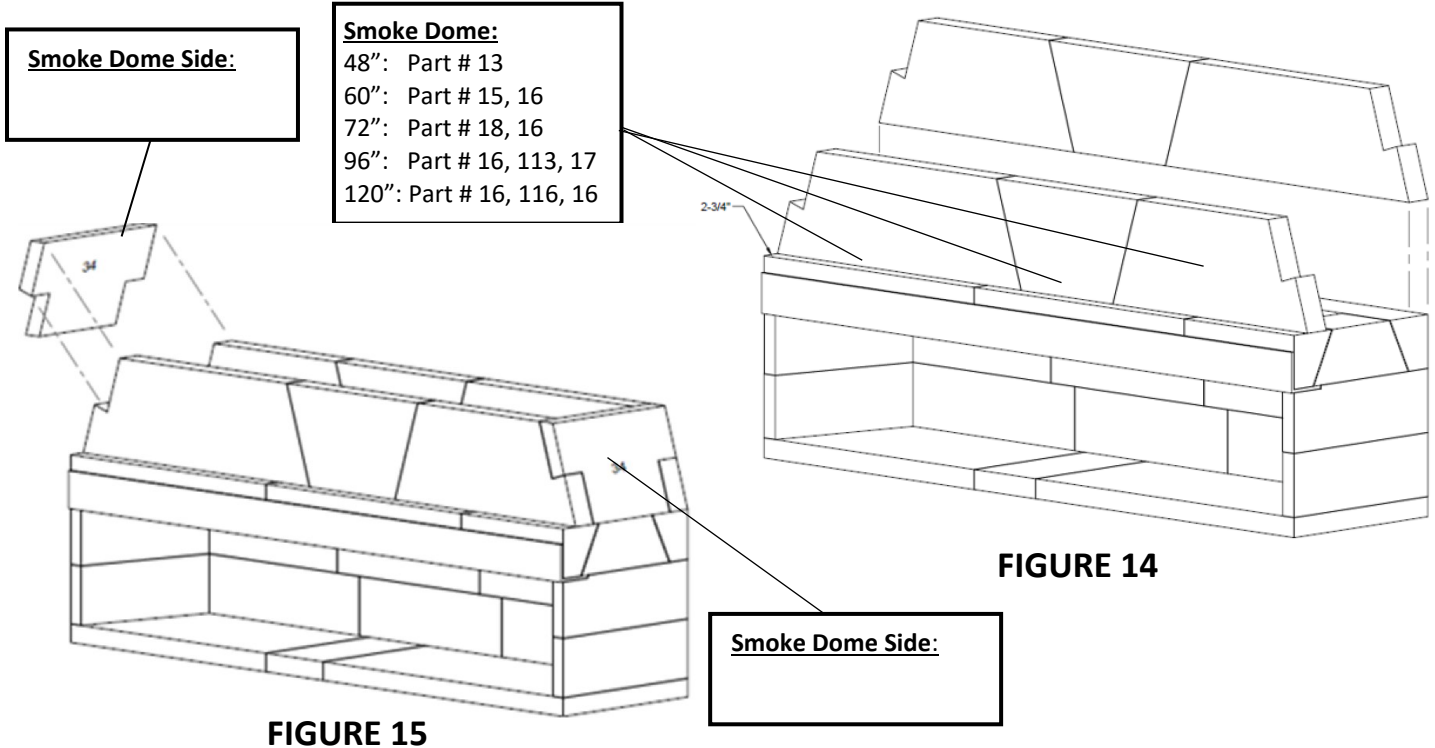
NOTE: Be sure to apply Earthcore Adhesive to contact surfaces between all Isokern components



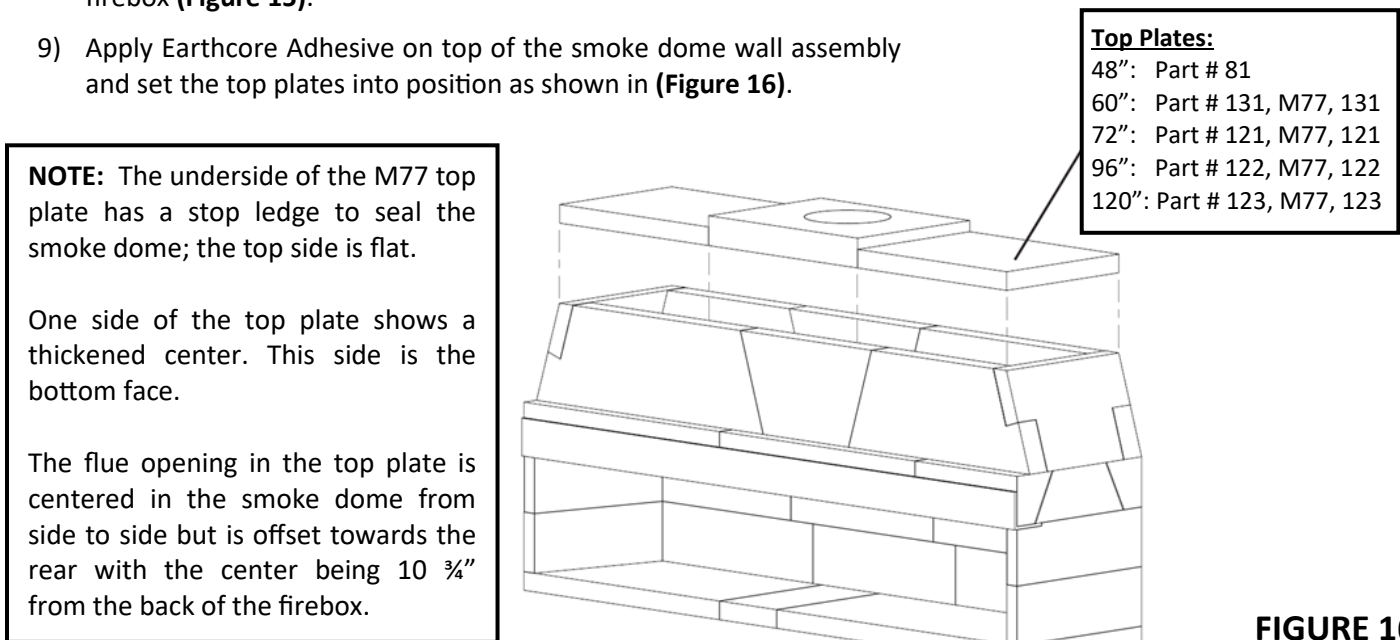
Isokern Maximus Linear Installation

- 7) Set the rear smoke dome component(s) across the damper beam in a bed of Earthcore Adhesive and flush with the back face of the rear damper beam lintel.

Apply Earthcore Adhesive along the top of the front damper beam along its entire length; bead should be 3" from the front edge. Place the front smoke dome component(s) on the bead of Earthcore Adhesive so that approximately a 17" gap exists between the front and rear smoke dome components (**Figure 14**).

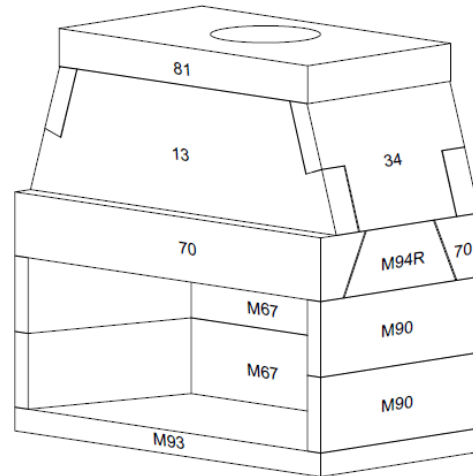


- 8) With the front/rear smoke dome components in place, apply Earthcore Adhesive to all adjoining surfaces of the sloping smoke dome sidewall components. The sloping smoke dome side walls will be placed in between the front and rear smoke dome components at the ends of the firebox and are designed to rest in their notched ends. Once assembled, compress the smoke dome components by applying pressure to the front/rear of the smoke dome assembly to force the components together. Repeat this process on the opposite side of the firebox (**Figure 15**).
- 9) Apply Earthcore Adhesive on top of the smoke dome wall assembly and set the top plates into position as shown in (**Figure 16**).

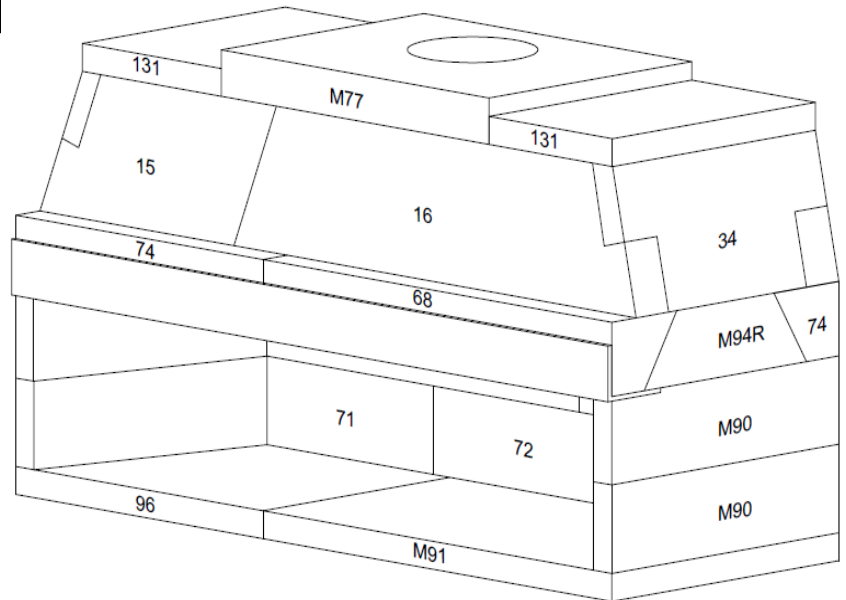


Assembled Maximus Linear Units

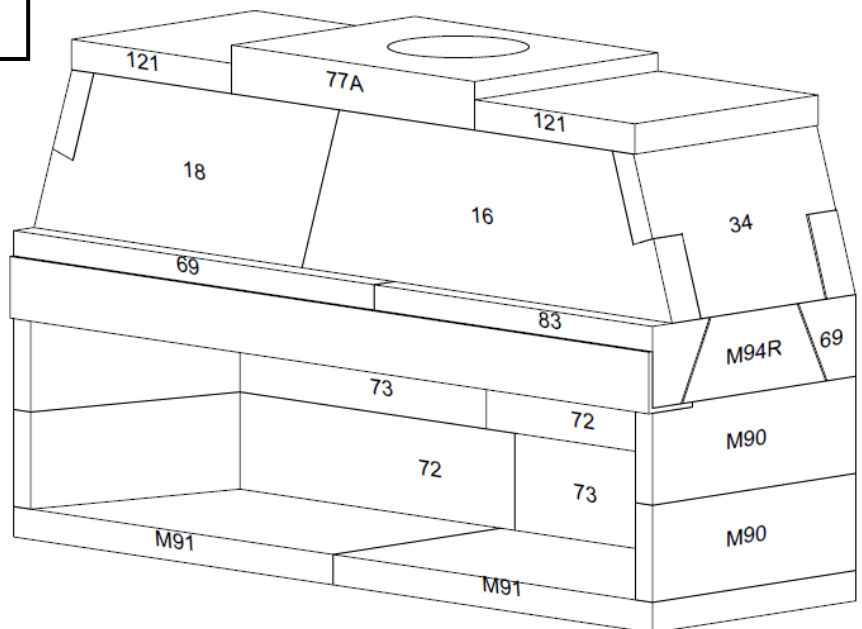
Assembled 48" Maximus Linear (82L48)



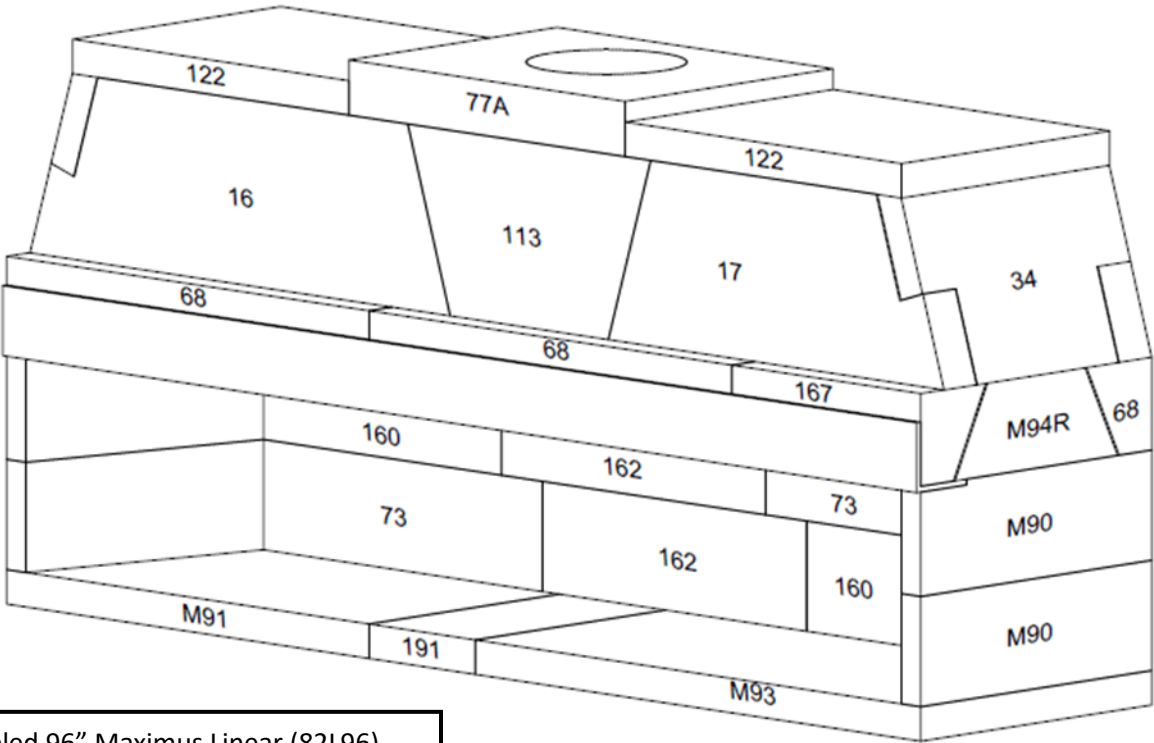
Assembled 60" Maximus Linear (82L60)



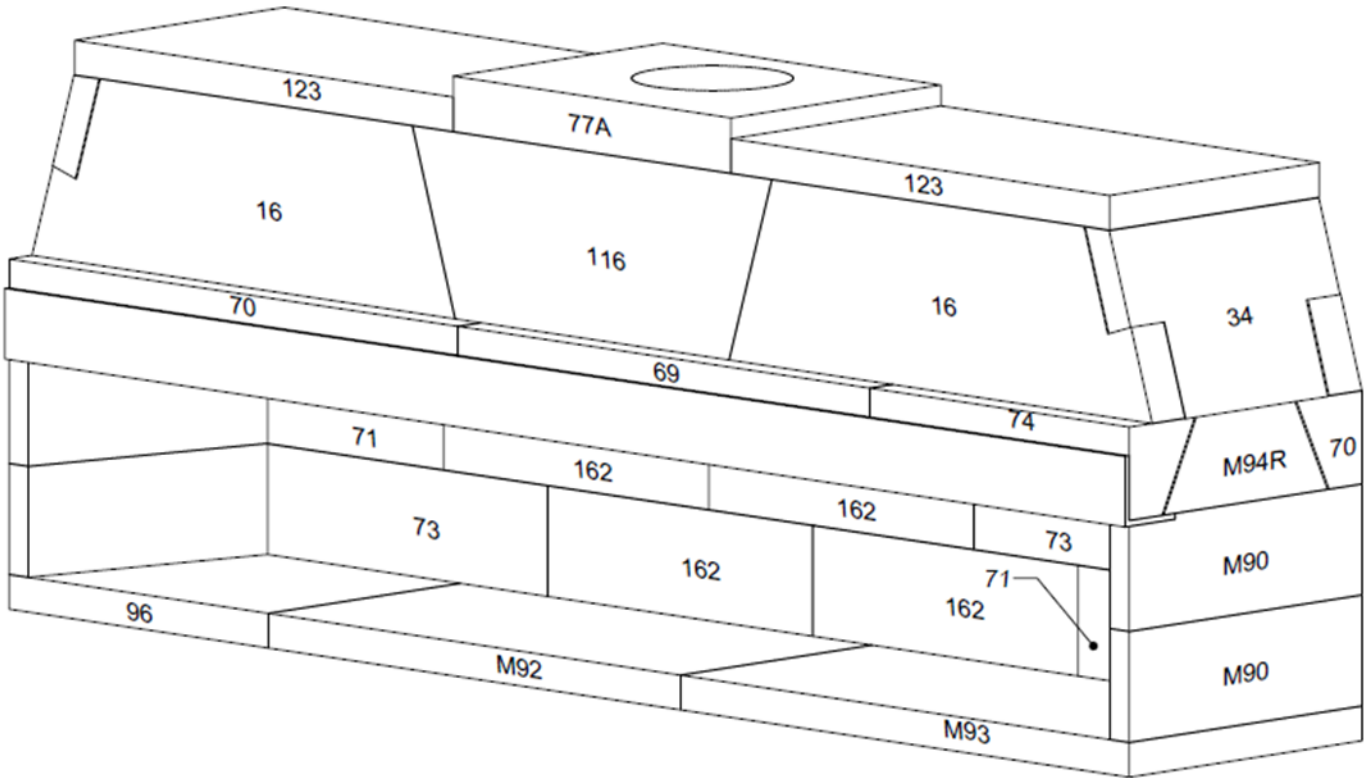
Assembled 72" Maximus Linear (82L72)



Assembled Maximus Linear Units



Assembled 96" Maximus Linear (82L96)



Assembled 120" Maximus Linear (82L120)

Assembled High Temp Lintel

- 2 high temp lintels, NVT-1 and NVT-1L, when connected, fit Maximus Linear models 96 and 120. The Maximus 48, 60, and 72 model will only use the NVT-1 lintel. **(Figure 17)**
- Field cut the high temp lintel at the perforated lines as required for the 48", 60", 96" and 120" unit. This will ensure the limit switch and micro-switch are in the proper position on the lintel. The 72" model does not require cutting. **(Figure 18)**
- For 60, 72, 96, and 120 Maximus Linear models, The high temp lintel fits horizontally under the angle steel. The (A) wire on both the left and right lintel shall be connected to each other. **(Figure 17, 19 and Page 45)**
- Measure and locate the centerline of the fireplace opening. The lintels attach to the bottom of the angle steel of the fireplace via high temp magnets. Position and center the connected lintels on the angle steel. **MAKE SURE THE LINTEL WITH THE DAMPER HANDLE IS ON THE RIGHT SIDE OF THE FIREPLACE AND PROJECTS INSIDE THE FIREPLACE.** **(Figure 19 and 20)**

FIGURE 17

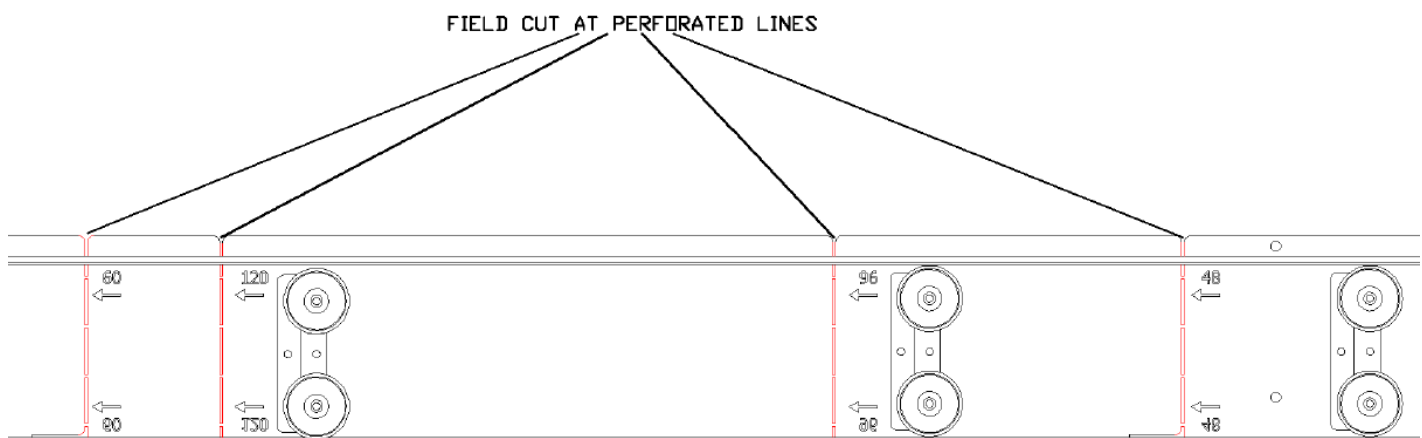
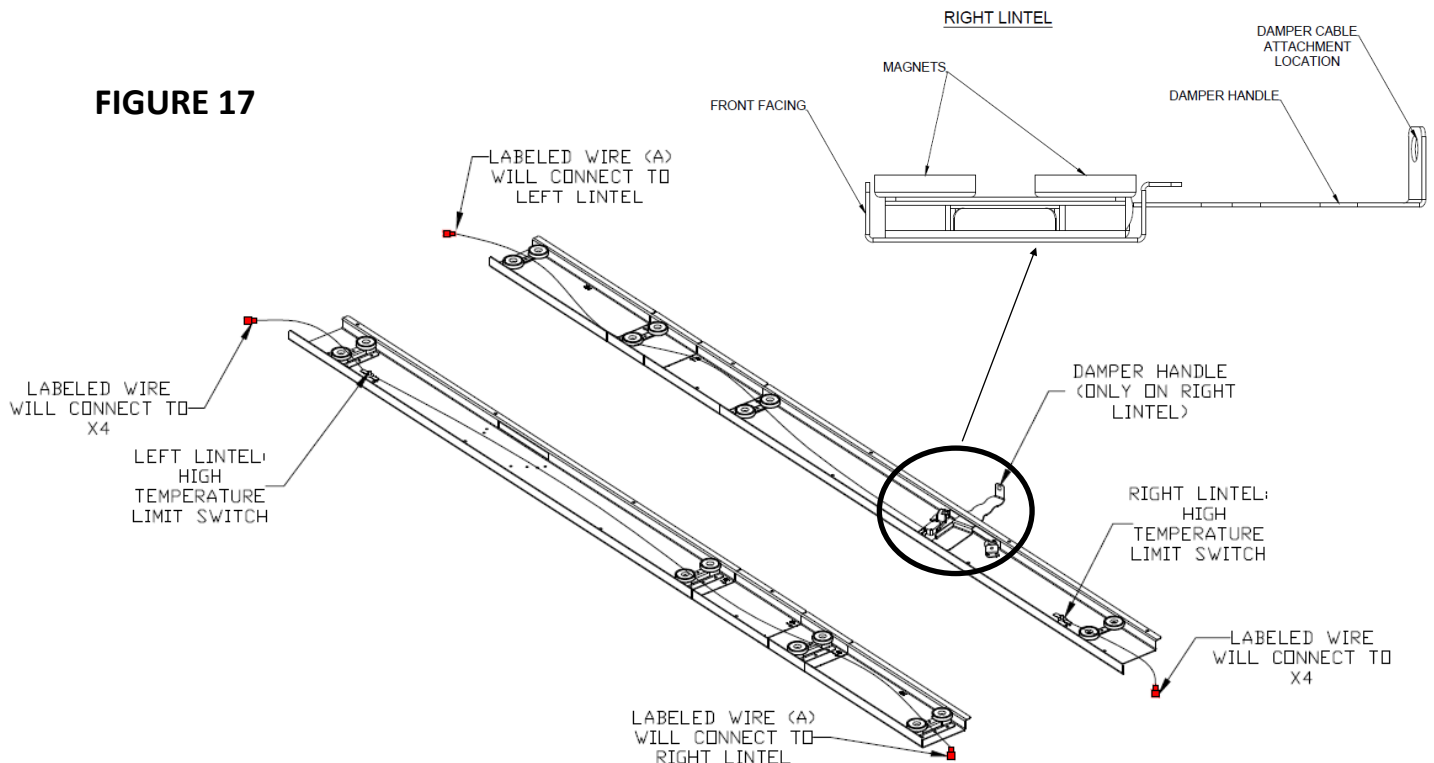


FIGURE 18

Assembled High Temp Lintel

- Once connected, both lintels should be flush against each other where they meet in the middle of the angle steel. The front should be flush in the same plane as the front of the angle steel. **(Figure 19)**
- For 48 Maximus Linear models, the NVT-1 high temp lintel has 8 pilot holes for the masonry anchor placement. Attach the high temp lintel flush against the under side of the front damper beam where 8 masonry screws are driven into the underside of the fireplace front damper beam. Do not overtighten **(Figure 20)**
 - The magnets attached to the lintel for 48 Maximus Linear models should be removed to provide a flush finish.
 - Simply unscrewing the nut under the magnet should separate it from the magnet bracket.

MODELS 60", 72", 96", and 120"

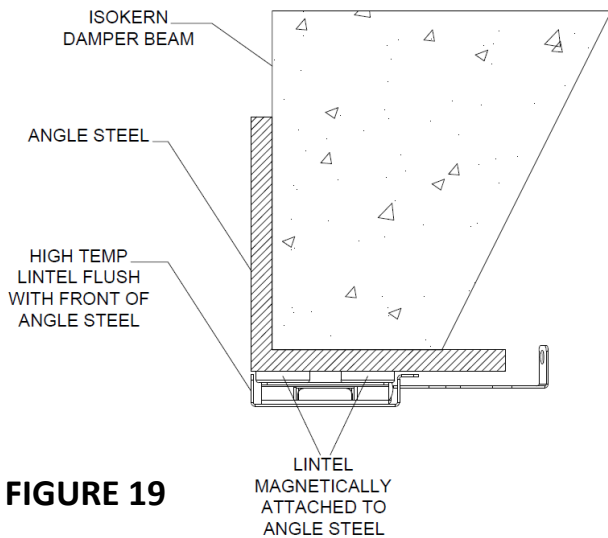


FIGURE 19

MODEL 48"

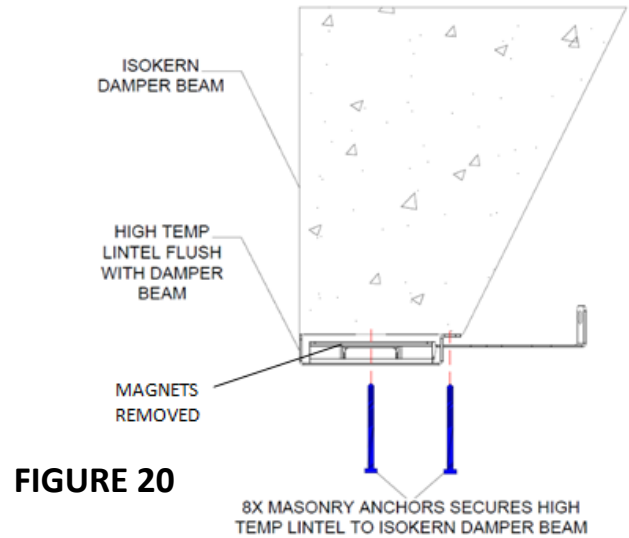


FIGURE 20

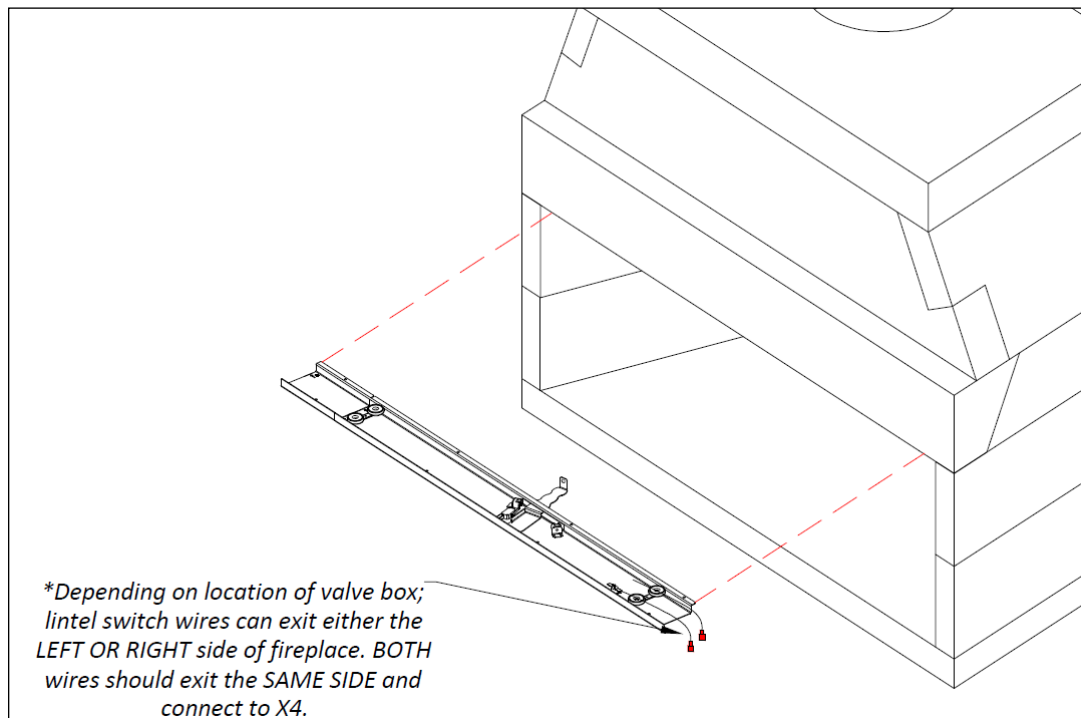


FIGURE 21

B-Vent Metal Chimney - General Information

The Maximus Linear Fireplaces are tested and listed for use only with the specified factory-built metal B-Vent chimney system as detailed in this manual. All Maximus Linear fireplace systems require 12" Metal-Fab Type-B Gas Vent Chimney System with Anchor Plate with Down-Draft Diverter and Damper. The exhaust flue gases are to be vented through the top of the unit with listed 12" B-Vent piping. A minimum of eighteen feet (18') as measured vertically from the anchor plate to the chimney cap is required. A maximum of forty feet (40') as measured vertically from the anchor plate to the chimney cap is allowed. Maximum chimney offset angle is forty five degrees off of vertical. Only one offset (2 elbows) allowed. Chimney must terminate vertically.

APPROVED MANUFACTURERS

Metal-Fab® (UL 441 & ULC S605) Type B Gas Vent

NOTE: The selected, approved chimney manufacturer must provide the masonry anchor plate with down draft diverter designed to fit their flue system.

All chimneys and chimney liners must be installed in accordance with the manufacturer's installation instructions and under the terms of their listing.

Refer to metal flue manufacturer instructions for information regarding approved chimney shrouds, clearance to combustibles, and or any information specific to that flue system. B-Vent Chimney is not designed for use on products that operate at continuous temperatures more than 1000°F.

IMPORTANT: Never fill any required clearance space with insulation or any other building materials surrounding the chimney. B-Vent chimney pipe requires one (1") air space clearance. Do not place any material within the required one (1") clearance zone. The vent pipe listing may be voided if the clearance requirement is not adhered to.

Exterior metal parts of the chimney, with exception of the mechanical draft components, can be painted with a high temperature rust proof paint. Wash the metal surface with a vinegar and water solution to remove any residue before painting. Painting the chimney will help to increase chimney life.

Interior chimneys shall be enclosed where they extend through closets, storage areas, occupied spaces, or anywhere the surface of the chimney could be contacted by persons or combustible materials. The air space between the outer wall of the chimney and the enclosure shall not be less than 1 inches.

Except for installation in one- or two-family dwellings, a factory-built chimney that extends through any zone above that on which the connected appliance is located is to be provided with an enclosure having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which it passes.

In cold climates, chimneys routed outside of the building should be enclosed in a chase. Exterior chases reduce condensation and enhance draft.

Proper planning for your B-Vent Chimney installation will result in enhanced safety, efficiency, and convenience. You must use only B-Vent Chimney parts and components to maintain a listed chimney system. Do not mix parts or try attempt to match with other products or use improvised solutions.

Install your Isokern fireplace as described in this installation manual and maintain all required clearances.

Connect only one fireplace per chimney. Follow the fireplace safety manual for maximum efficiency and safety. Do not over fire. Any damage to the fireplace or chimney can possibly void the warranty. Do not burn food, wood, driftwood, plastic, or chemically treated wood such as railroad ties. They are corrosive to your chimney system. Use of any fuel other than gas on burner rating plate will void the warranty of this fireplace and is prohibited. **THIS IS A GAS ONLY FIREPLACE.**

IMPORTANT: A major cause of chimney related fires is failure to maintain required clearance (air spaces) to combustible material. Minimum clearance for 12" diameter B-vent chimney is one (1) inch. It is of utmost importance that this chimney system is installed only in accordance with these instructions.

B-Vent Metal Chimney & Components

Component	Part#	Description
	12M12	B-Vent 12" Length
	12M18	B-Vent 18" Length
	12M24	B-Vent 24" Length
	12M3	B-Vent 3' Length
	12M4	B-Vent 4' Length
	12M5	B-Vent 5' Length
	12M12A	B-Vent 12" Adjustable Length
	12M18A	B-Vent 18" Adjustable Length
	12M45	45 Deg Adjustable Elbow
	NVT-1/ NVT-1L	<u>High Temp Lintels</u> (48"-72" Models: NVT-1) (96 & 120 Models: NVT-1 AND NVT-1L)
	NVT-2	12" B-Vent Down Draft Diverter w/Damper
	12MC	B-Vent Vent Cap/ Termination
	12MGR	B-Vent Guy Ring
	12MFS	B-Vent Firestop
	12MSC	B-Vent Storm Collar

Component	Part#	Description
	12MF	B-Vent Standard Flashing
	12MFT	B-Vent Flat Tall Cone Flashing

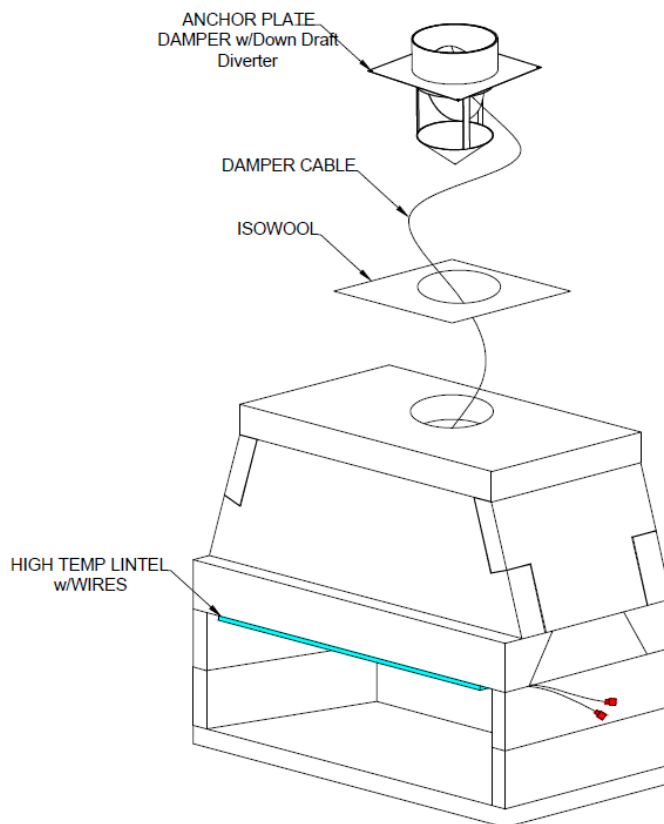


FIGURE 22

B-VENT ANCHOR PLATE AND CHIMNEY INSTALLATION

- 1) Mount Anchor Plate and Damper with Down Draft Diverter: Chimneys for all Maximus Linear fireplace systems must begin with an Anchor Plate and Damper with Down Draft Diverter. It is important that the surface of the Isokern chimney has a level surface on which to attach the Anchor Plate. If the top of the Isokern does not have a level surface, then it will need to be modified accordingly. **(Figure 22 & 23).**
- 2) Center the Isowool blanket over Isokern Top Plate's outlet and trace the outlet's outline with a pen or marker. Cut a hole in the blanket along this outline to match the hole in the Isokern top plate. Center the cut Isowool blanket over the Isokern Top Plate flue opening, then center anchor plate over the Isowool blanket **(Figure 22).**
- 3) Mount the Anchor Plate over Isowool blanket. The front of the Anchor Plate is labeled "FRONT" and must be towards the front of the fireplace. Secure the Anchor Plate with four (4) masonry anchors.
- 4) Secure the damper cable to the damper lever. Make sure when attaching the damper cable that the damper fully closes and cable is taut when turning the lever all the way to the right. This will require loosening the damper cable clamp and adjusting damper cable length. Retighten cable clamp and trim excess cable if needed. **(Figure 23).**

NOTE: When in the open position, the damper should be rotated a full 90 degrees from the closed position.

- 5) Starting at the anchor plate, attach the first section of B-Vent Pipe.

The B-Vent sections and components use the Metal-Fab positive twist-lock for interconnections. Align the ends of the vent, push together then twist section to lock in place **(Figure 24).**

No additional fasteners are required to assure a safe installation. It is acceptable to apply screws at the joints if local code requires, or at the installing contractor's option, provided that the screws do not penetrate the flue inner wall.

NOTE: When installing B-Vent always align "Up" arrow away from appliance. Chimneys must be installed so that access is provided for inspection and cleaning.

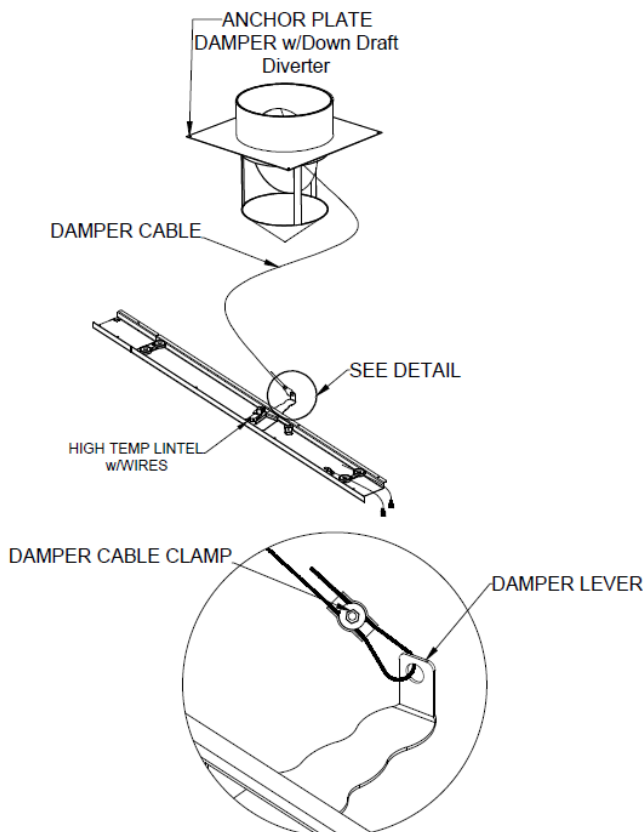


FIGURE 23

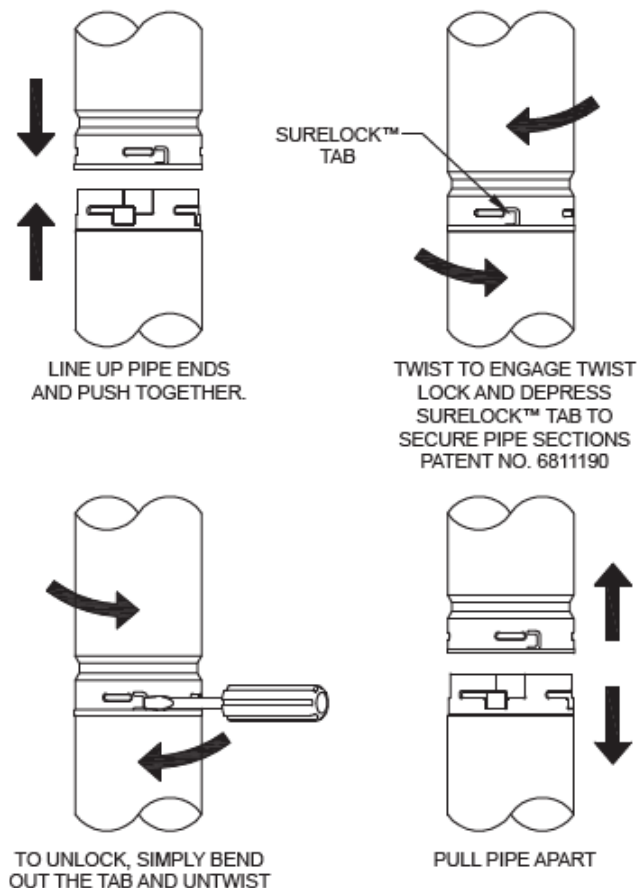


FIGURE 24

B-VENT METAL CHIMNEY INSTALLATION

- 6) If the B-Vent must penetrate the ceiling between floors, cut a hole in the ceiling 2 inches larger than the outside diameter (OD) of the outer casing. The B-Vent is to be centered in this opening. When installed, check to make sure the one-inch (25.4 mm) clearance to combustible has been maintained.

NOTE: The B-Vent type chimney system must be enclosed within a chase when installed in or passing through a living area where combustibles or people may come in contact with it. This is important to prevent possible personal injury or fire hazard.

- 7) Continue with B-Vent penetrating the roof.

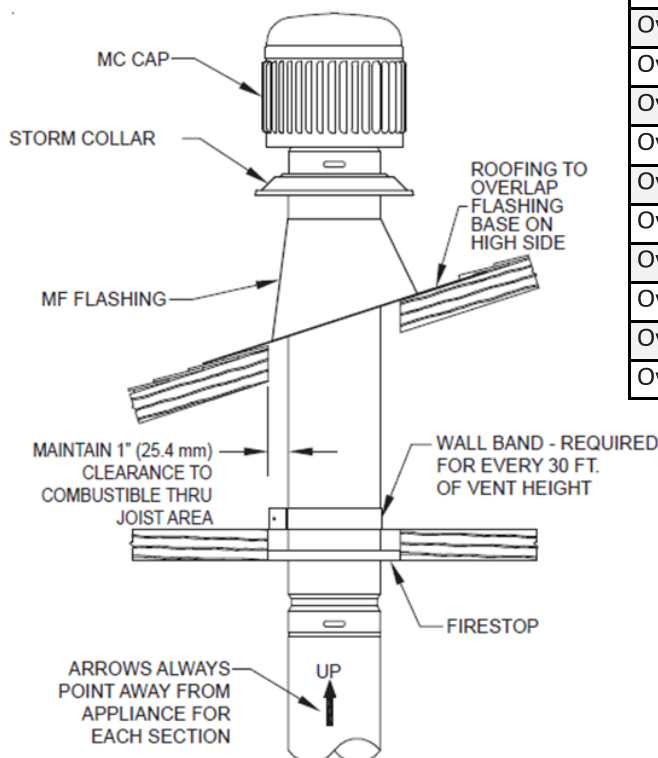
NOTE: For Canadian installations, use labeled ULC section, designated with Suffix G, on vent sections exposed to atmosphere.

At the roof, the opening should be 2 inches (51 mm) greater than the B-Vent OD. Above the roof, a flashing is required to maintain the one-inch (25.4 mm) clearance to the combustibles of the roof. Installation of a storm collar allows water to drain over the flashing.

- 8) Install the B-Vent cap (12MC) onto the B-Vent.

NOTE: Vent height minimum is 18 feet, maximum height of 40 feet.

A B-Vent Cap should be used on all installations to prevent back drafts and to keep out rain and debris. The vent must extend through a flashing and should terminate with the lowest discharge opening no closer to the roof than the minimum height shown in the table below. These minimum heights may be used provided the vent is not less than 8' from any vertical wall. For installations not covered in table below, the lowest discharge opening of the vent cap should be at least 2' above the highest point where it passes through the roof. All gas vents extending above the roof more than 5 feet must be securely guyed or braced.



Roof Pitch	Minimum Height	
Flat to 7/12	(305 mm)	1.0 ft
Over 7/12 to 8/12	(451 mm)	1.5 ft
Over 8/12 to 9/12	(610 mm)	2.0 ft
Over 9/12 to 10/12	(762 mm)	2.5 ft
Over 10/12 to 11/12	(991 mm)	3.25 ft
Over 11/12 to 12/12	(1218 mm)	4.0 ft
Over 12/12 to 14/12	(1524 mm)	5.0 ft
Over 14/12 to 16/12	(1829 mm)	6.0 ft
Over 16/12 to 18/12	(2134 mm)	7.0 ft
Over 18/12 to 20/12	(2286 mm)	7.5 ft
Over 20/12 to 21/12	(2438 mm)	8.0 ft

FIGURE 25

Firebrick Installation - General Information

Earthcore/ Isokern requires the Maximus Linear Series fireboxes be lined with a minimum one and one-eighth (1-1/8") thick firebrick ("Split") for the sidewalls and 2-1/4" thick firebrick ("Full") on the floor. Thicker firebrick may be used as an option. The pattern for the firebrick lining is an owner option. The ISOSET mortar by Earthcore is to be used when lining the Isokern Fireplace.

ISOSET FIREBRICK MORTAR APPLICATION:

- Add .75 quarts of water per 10 lbs. of dry product until completely blended.
- Only mix what can be utilized within 15 minutes.
- Do not re-temper (the addition of water after the chemical reaction has begun).
- The use of warm water will accelerate setup.
- Joint thickness should be thin (1/4"- 3/8")
- Complete set time is between 48 and 72 hours.
- For best results, please allow 28 days before heat is applied.
- Approximately 35 to 40 lbs. of prepared mortar will lay up one hundred 9" x 4-1/2" x 2-1/2" straights.

IMPORTANT!!!: DO NOT add additives, such as fire-clay, sand, cement, or other accelerators.

These instructions may vary because of different climates and conditions. The use of good masonry practices for your area should also be considered.

FOR BEST RESULTS:

- Wet mop the inside of the fireplace with a damp sponge to remove dust and loose particles from the interior before installing firebrick. Keep the fireplace damp while installing firebrick.
- After "wet sponging interior" of firebox, apply a 1/4" notch bed joint on rear, sides, and floor.
- Dip each firebrick in a pale of water before applying mortar to one side for adherence to firebox.
- Facing joint dimensions of 1/4" to 3/8" in the brick work is recommended and has the best appearance. Other face joint dimensions are acceptable, however smaller joints may not leave room for heat expansion of firebrick.

NOTE: Earthcore makes no claims as to the performance of firebrick or firebrick mortar(s). It is typical for heat stress cracks to appear in the firebrick in fireplaces.

Firebrick Installation - Maximus Linear Fireplace

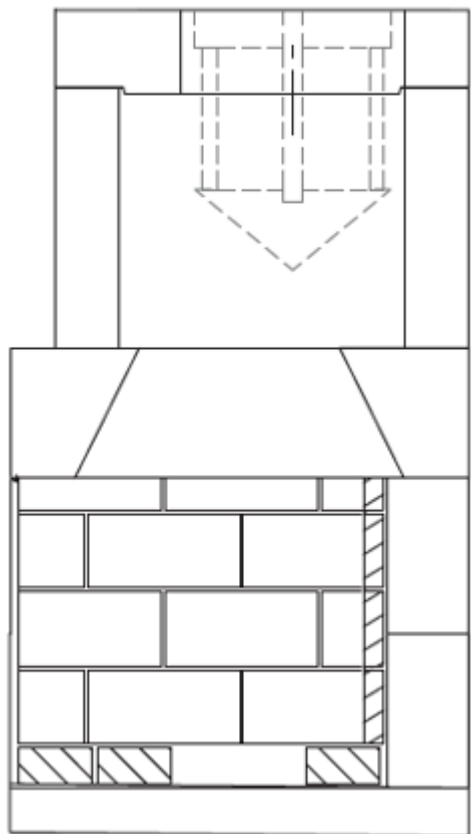


FIGURE 26

- 1) Starting approximately 1/2" from the rear of the firebox, lay one course of "full" sized firebrick on floor. Ensure a gap of approximately 1/2" is kept between firebrick and sidewall to allow for expansion.
- 2) Lay two courses of "full" sized firebrick so that the leading edge of the coursing is aligned with opening of the firebox. Ensure a gap of approximately 1/2" is kept between firebrick and sidewall to allow for expansion.
- 3) Apply "split" firebrick to the rear wall of the unit. Ensure approximately 1/2" gap is kept between firebrick and sidewall, as well as an 1/4" gap is kept between firebrick and damper beam assembly to allow for expansion.
- 4) Starting at the front edge of the unit's sidewall, apply "split" firebrick to the side wall of the unit. Ensure approximately 1/4" gap is kept between firebrick and damper beam/damper block assembly to allow for expansion.
- 5) Repeat on opposite side wall.

IMPORTANT:

Ensure that the required holes for the Isoflames Linear burner's 3/8" gas supply line and pilot assembly gas and electrical connections are drilled prior to firebrick installation. **DO NOT COVER THESE AREAS WITH FIREBRICK!**

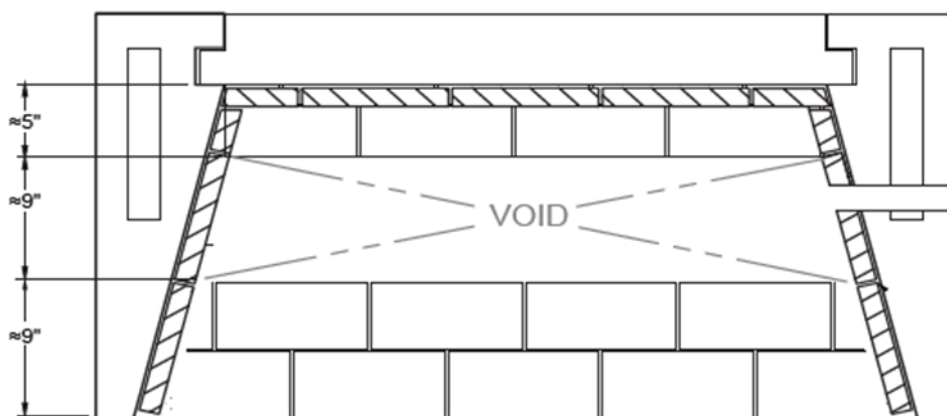


FIGURE 27

NOTE: Gas and electrical connections may be brought through the rear wall of the unit and into the area of the firebrick cavity. A gap will need to be left in the firebrick extending from the cavity to the rear wall of the unit for passage of the 3/8" gas line, pilot tube, and electrical connections. Ensure all holes are filled with mortar after installation.

Access Modification: Combustion Air Kits, Gas & Electrical Line Feed

4" air kits are not required but recommended by Earthcore for the installation of this fireplace. Air kits may help improve fireplace operation in homes that are tightly sealed and with other ventilating appliances installed (**Figures 28 and 29**).

TYPICAL AIR KIT COMPONENTS:

- 4" diameter flexible stainless-steel duct
- Stainless steel sleeve approximately 12"
- Exterior vent termination with dress plate
- Weather hood including rodent prevention ¼" mesh screen

On one side of the firebox, the access door is fitted into the front 1/3 of the side wall. On the other side of the firebox, install in the opposing corner. The air kit's sleeve can be introduced into the firebox side wall by core drilling an appropriately sized hole at the selected firebox location. Keep the top of the access hole no more than six inches (6") above the finished firebrick floor. The hole size should allow for a one-quarter inch (1/4") mortar joint around the air access sleeve for heat expansion.

IMPORTANT: It is highly recommended that the air kit duct be routed in the most direct path to the outside wall of the building. Air kits are typically supplied with 10' duct sections. It is recommended not to exceed twenty feet (20') of four-inch (4") pipe. If a longer length is required, it is recommended that a six-inch (6") diameter pipe be utilized, extending up to forty feet (40').

WARNING!!!: Do not use combustible duct material. Avoid installing a combustion air inlet where the opening could be blocked by snow, bushes, or other obstacles. Air inlet ducts shall not terminate in attics, basements, or garage spaces.

GAS LINE FEED

All Maximus Linear fireplaces require ¾-1" hole be drilled into the sidewall for the installation of 3/8" hard-piped gas supply to the Isoflames Linear Burner. Ensure all holes are filled with Earthcore Adhesive after installation (**Figure 30**).

ELECTRICAL LINE FEED

All Maximus Linear fireplaces require a ¾-1" hole be drilled into the side wall for the connection of the pilot assembly gas and electrical connections. Be sure to follow the explicit electrical line connection instructions for the Isoflames Linear Burner and mechanical ventilation system as detailed in this manual. Ensure all holes are filled with Earthcore Adhesive after installation (**Figure 30**).

NOTE: Main gas line and electric line must be fed through separate access holes.

Maximus Linear Series	
MODEL#	Minimum Consumption Air (CFM)
82L48	185
82L60	262
82L72	312
82L96	398
82L120	498

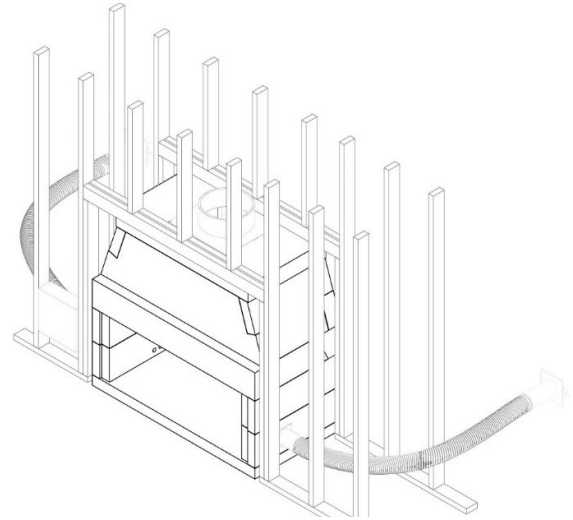


FIGURE 28

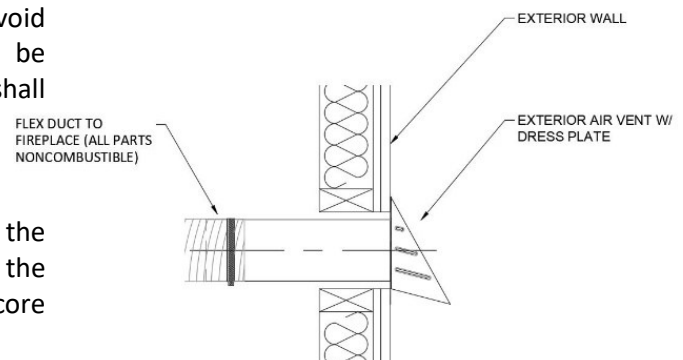


FIGURE 29

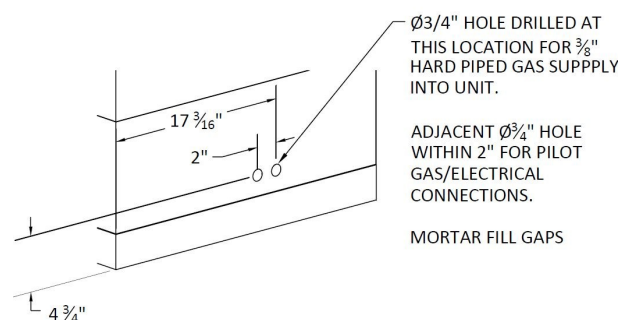


FIGURE 30

Flush Wall Finish Detail

Maximus Linear units shall be installed so that the rough front face of the Isokern firebox is flush to the outside edges (room side) of the rough framing members that create the room wall's finish (**Figure 31**).

IMPORTANT!!!: Do not build a combustible frame wall in front of the Maximus Linear Fireboxes (**Figure 32**).

CLEARANCE TO DRYWALL:

Drywall can be placed directly in contact with the front of the Maximus Linear smoke dome. Drywall can be hung on the framing members and pass across the face of the Maximus Linear smoke dome and in contact with it.

Although combustible wood sheathing materials such as plywood and particle board may be used to cover the front of the Isokern smoke dome and be in direct contact with it, this sheathing shall terminate a minimum of eight inches (8") away from each side of the finished fireplace opening and a minimum of eight inches (8") inches above the top of the finished fireplace opening.

IMPORTANT: When setting the noncombustible facing material onto the drywall that spans across the top of the firebox opening there will be a gap between the back of the noncombustible finish material and the rough front face of the Isokern firebox.

Be sure to fill this gap with Earthcore Adhesive in conjunction with placement of the code required noncombustible finish facing material that is set across the top of the firebox opening.

Noncombustible facing/finish material shall be installed and shall extend a minimum of 8" to sides and 8" to the top of the finished firebox opening. Any gaps or voids that may be left behind the noncombustible finished facing materials and the firebox must be filled with Earthcore Adhesive.

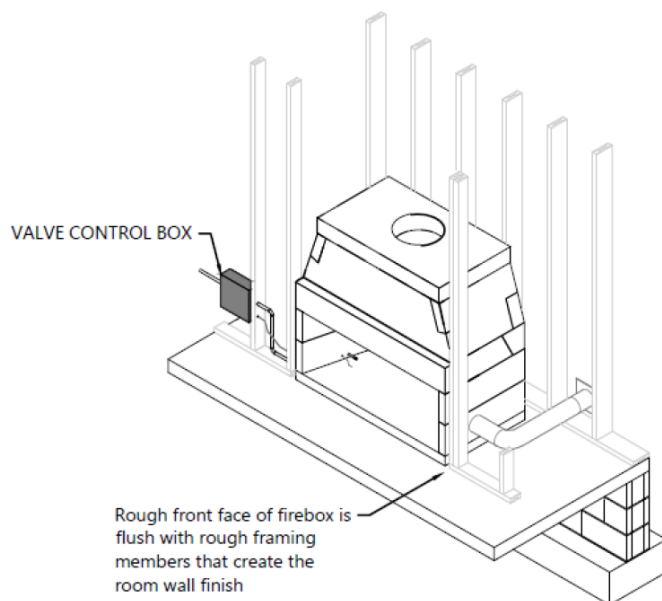


FIGURE 31

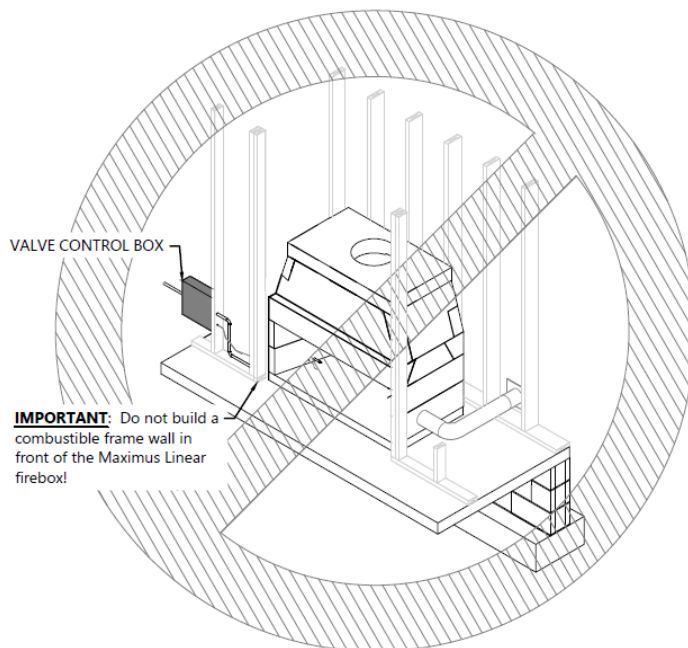


FIGURE 32

WARNING!!!: Avoid false chimneys. Failure to seal any gaps between the front face(s) of the firebox and the back of the noncombustible finished facing material will create what is known as a "false chimney" or "secondary chimney". A "false chimney", in this case is the narrow gap between the back of the noncombustible facing material at the top of the firebox opening and the rough front of the Maximus Linear damper assembly/ smoke dome. If left unfilled this gap creates a "false- chimney" which can cause a fire hazard by drawing considerable heat out of the firebox and into the space behind the noncombustible finish facing and then up into the wall cavity behind the drywall or other sheathing material that houses the Isokern fireplace.

Clearance to Combustible Trim

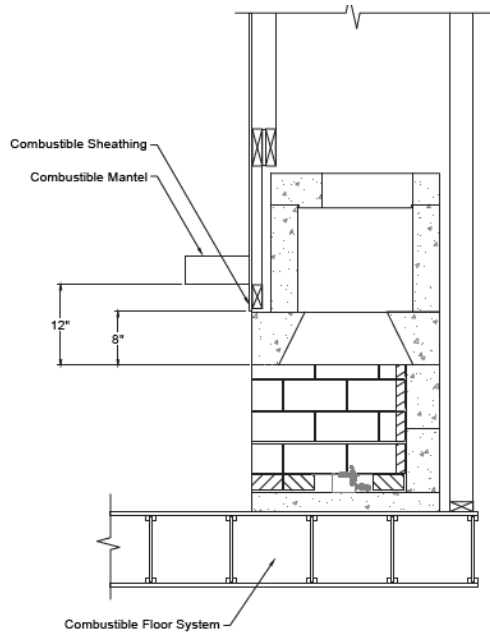


FIGURE 33

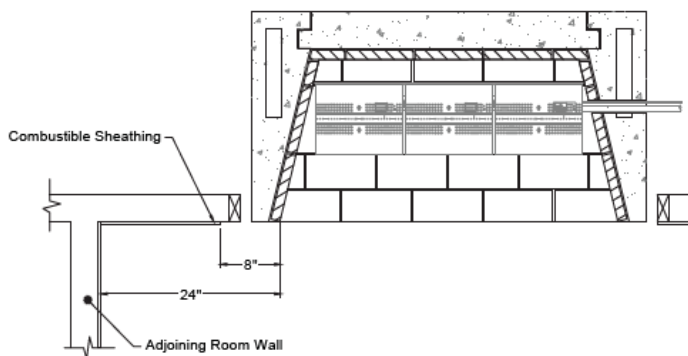


FIGURE 34

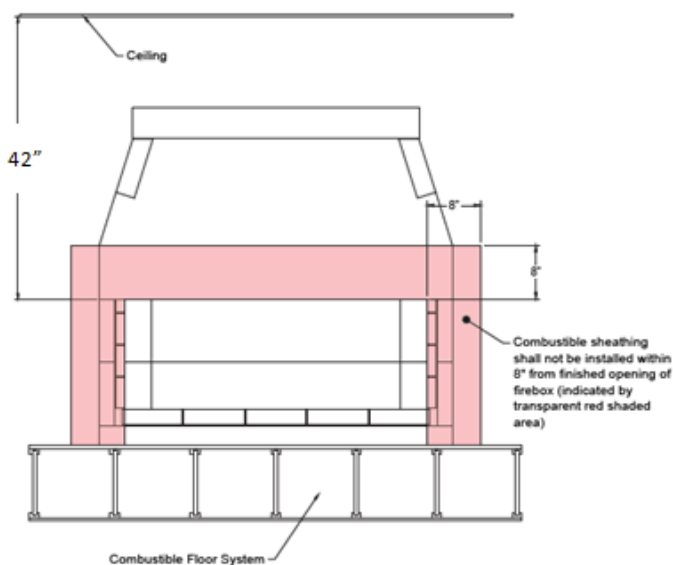


FIGURE 35

NOTE: “Clearance to Combustible Trim” are those distances required to ensure that a fireplace mantel or facing will not catch fire. In most cases the distances should also be adequate to prevent any discoloration or warping due to heat. However, each installation presents a unique and completely different set of circumstances involving many variables.

These variables include paint or finish composition, previous exposure to heat, methods and quality of construction, air flow patterns, etc. Because of these variables, the manufacturer does not guarantee that heat warping, or discoloration will never occur.

MANTEL AND MANTEL SHELF CLEARANCES:

Maximus Linear units are designed to be installed so that the rough front face(s) of the Isokern firebox and smoke dome sit flush with the face of the rough framing members that create the room wall finish.

All combustible trim projecting less than one-and one-half inch (1-1/2”) from this plane must be kept a minimum of eight inches (8”) from the sides/top of the firebox openings.

All combustible trim projecting more than one and one-half inch (1-1/2”) must be kept a minimum of twelve inches (12”) from the fireplace opening.

Parts of the combustible mantel assembly located along the sides of the fireplace opening, which project more than one- and one-half inches (1-1/2”) from the face of the fireplace, shall have additional clearance equal to that of the projection.

Parts of the combustible mantel assembly located above and projecting more than one- and one-half inches (1-1/2”) from the fireplace opening shall not be placed less than twelve inches (12”) from the top of the fireplace opening (**Figure 33**).

ADJOINING WALLS:

Side walls and walls to rooms adjoining the Isokern fireplace installation cannot be closer than twenty-four inches (24”) to the finished fireplace opening (**Figure 34**).

CEILINGS:

The minimum clearance from the top of the fireplace opening to a ceiling is forty-two inches (42”) (**Figure 35**).

Isoflames Linear Burner - Safety Instructions

WARNING!!!: This appliance assembly contains burner orifices specifically for the input gas specified on the burner and box, as well as the BTU rating specified in this manual. Modifying or failure to use the factory orifice may cause property damage, personal injury, or loss of life.

Read these instructions completely before installing and using ISOFLAMES Linear Burner.

- 1) This Maximus Linear Series fireplaces must utilize the Isoflames Linear Burner that is specified for the particular fireplace model.
- 2) The Maximus Linear Series fireplaces utilize a mechanical draft system that interlocks with the Isoflames Linear burner to ensure burner operation is only possible when the mechanical draft system is energized, and safe operation is proved by the control. This ensures all carbon monoxide and other flue gases will be expelled through chimney system.
- 3) Solid fuels shall not be burned in the Maximus Linear Series fireplaces, or any fireplace where a decorative appliance has been installed.
- 4) The minimum inlet supply pressure for the purpose of input adjustment is 5.0 inches (natural gas) 11.0 inches (propane) in water column. The maximum inlet supply pressure is 10.5 inches (natural gas) 13.0 inches (propane) in water
- 5) Gas type will be indicated on the burner rating plate. Do not use a natural gas burner with propane or a propane burner with natural gas. Appliance is not convertible to use other gases.
- 6) The installation, provisions for combustion, and ventilation air must conform to the National Fuel Gas Code, ANSI Z223.1/ NFPA 54, or the Natural Gas and Propane Installation code, CSA B149.1.
- 7) The appliance and its main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas piping system by closing its equipment shutoff valve during any pressure testing of the supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).
- 8) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- 9) Periodic examination and cleaning of the venting system of the solid fuel burning fireplace, including frequency of such examination and cleaning, by a qualified agency.
- 10)The appliance area is to be clear and free from combustible materials, gasoline and or flammable vapors and liquids. For warranty to be valid gas log sets must be installed by a NFI certified or other qualified professional installer.
- 11)Always check local building codes governing fireplaces and fireplace installations. ISOFLAMES Linear Burner installation must comply with all local, regional, state, and national codes and regulations.
- 12)This appliance is only for use with the type of gas indicated on the rating plate. This appliance SHALL NOT be field converted for use with other gases with Propane (LP) or Natural Gas (NG).
- 13)This appliance shall only be installed, serviced, or inspected by qualified professional service technician.
- 14)For propane (LP) use do not place propane supply tank(s) inside any structure. Locate propane supply tank(s) outdoors.
- 15)To prevent performance problems, do not use propane fuel tank of less than 100 lbs. capacity.
- 16)This decorative gas appliance reaches high temperature. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 17)Turn the appliance off and allow to cool before servicing. Always shut off any electricity and gas to the appliance while working on it. Only a qualified service person should install, service or repair this appliance. Have your appliance inspected annually by a qualified service person.

Isoflames Linear Burner - Safety Instructions

- 18) It is imperative that the unit's control areas, burners and circulation air passages be kept clean.
- 19) Keep all combustible material, gasoline, and other flammable liquids at a safe distance from the fireplace. Do not use the appliance where these items are used or stored. Decorations, clothing, and other such combustible items should not be placed on the appliance.
- 20) Do not cook food or burn paper or other object(s).
- 21) Do not use any solid fuels - wood, coal, paper, cardboard, etc. - Use only the gas type listed on the fireplace's burner rating plate.
- 22) Do not in any way obstruct the flow of combustion and ventilation air. Provide adequate clearances around air openings into the combustion chamber as well as adequate accessibility clearances for servicing and proper operation.
- 23) Never install an ISOFLAMES Linear Burner component or accessory that has visible or suspected physical damage. These items should be inspected by a qualified representative to ensure safe condition. When in doubt, consult your local supplier.
- 24) Do not alter or modify the ISOFLAMES Linear Burner or burner components under any circumstances. Modification or alteration of any sort may void manufacturer's warranty, listings, and approvals.
- 25) The ISOFLAMES Linear Burner system is not intended to heat an entire home or to be used as a primary heat source.
- 26) Children and adults should be alerted to the hazards of high surface temperature and should stay away from this appliance to avoid burns or clothing ignition.
- 27) Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to the fireplace, install an adjustable safety gate to keep toddlers, young children and other at-risk individuals out of the room and away from hot surfaces.
- 28) Clothing or flammable material should not be placed on or near the appliance.
- 29) Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 30) Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
- 31) Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.

Isoflames Linear Burner - Safety Instructions

WARNING!!!: This product contains or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this fireplace. Improper use of this fireplace can cause serious injury or death from fire, burns, explosions and carbon monoxide poisoning.

DANGER!!!: CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

Propane (LP) gas and natural gas (NG) are both colorless and odorless gases. An odor making agent is added to each of these gases to help you detect a gas leak. However, the odor added to these gases can fade and gas may be present even though no odor exists.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble flu symptoms, including headaches, dizziness or nausea. If you have these signs the fireplace may not have been installed properly, get fresh air at once! Have the fireplace inspected and serviced by a qualified service person or your gas supplier. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung diseases or anemia, people at high altitude or under the influence of alcohol. Earthcore Industries strongly recommends the use of a carbon monoxide detector/alarm device wherever gas fired appliances are in use.

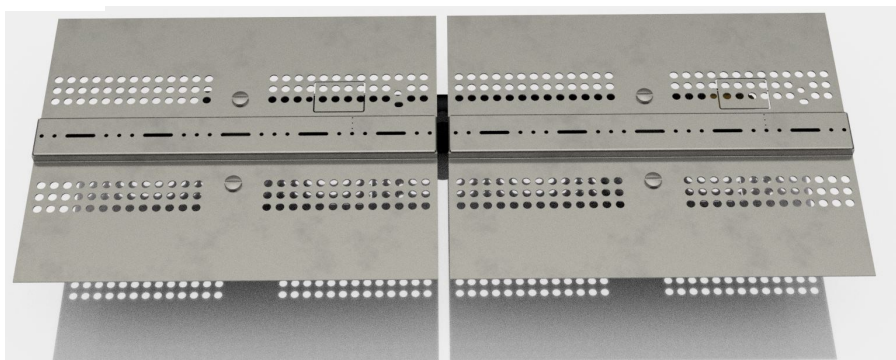
All parties either involved in or associated with the installation, service and use of this fireplace must read this entire manual. Keep this manual for reference and as a guidebook to safe operation of this fireplace.

WARNING!!!: This unit is not for use with solid fuel.

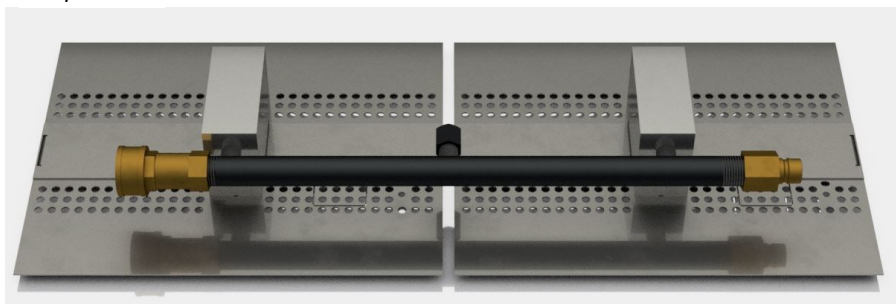
Isoflames Linear Burner - Components List

①

NOTE: single burner segment shown



Top view

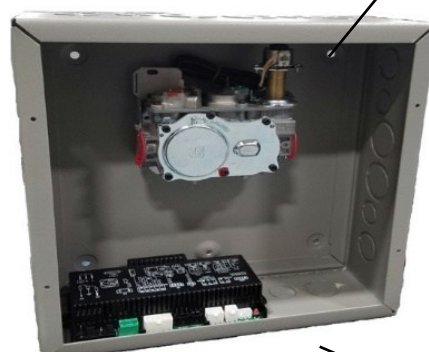


Bottom view

②



③



④



⑤

⑦



⑥



TABLE 2

Item No.	Description	Part No.	Qty
1	Main Burner Assembly (natural gas)	ISF-E-36/48/60/72/96N	1
	Main Burner Assembly (propane)	ISF-E-36/48/60/72/96P	1
2	Pilot Assembly (natural gas)	ISF-E-PAN	1
	Pilot Assembly (propane)	ISF-E-PAP	1
3	Gas Valve (natural gas)	ISF-E-GVN	1
	Gas Valve (propane)	ISF-E-GVP	1
4	Control module/remote receiver	ISF-E-ICM	1
5	Remote Transmitter	ISF-E-RMT	1
6	1/2" Flared fitting female adapter	ISF-12FF-12FID	1
7	3/8" Flared fitting female adapter	ISF-12FF-38FID	1

Isoflames Linear Burner - Specifications

TABLE 3

Burner Specifications								
Burner Model	Minimum Fireplace Dimension (in)				BTU			
	Depth	Height	Width		Nat. Gas		L.P. Gas	
			Front	Rear	High	Low	High	Low
ISF36LB	17.5	16	48	37	54K	38K	48K	36K
ISF48LB	17.5	16	60	49	72K	50K	64K	48K
ISF60LB	17.5	16	72	61	90K	63K	80K	60K
ISF72LB	17.5	16	84	73	108K	75K	96K	72K
ISF96LB	17.5	16	108	97	110K	84K	105K	87K

NOTE: Height is measured from hearth floor to bottom of lintel

Gas Line & Valve Box Installation

This appliance must be connected to the gas line in accordance with local codes and/or the National Fuel Gas Code, ANSI Z223.1. After connecting the gas line, all joints in the line and connections at the valve should be checked for leaks before final positioning of the unit. Conduct a gas leakage test of the appliance piping and control system downstream of the shutoff valve in the supply line to the appliance.

- 1) The valve control box comes with an 110" pilot assembly lead; therefore, the box must be mounted within 7' of the fireplace for models ISF36/48/60LB and within 2' for models ISF72/96LB. Valve and controls are contained in a 12" x 12" x 4" NEMA 1 enclosure (**Figure 36**)
- 2) Attach the metal enclosure to the studs using standard building materials. The metal enclosure must be mounted in a location that can be accessed in the future for additional connections & future servicing.
- 3) Installation and servicing of gas appliances and ignition systems must only be performed by qualified personnel.
- 4) Turn off gas and electricity before starting installation or service.
- 5) Make sure gas piping is pressure tested before control is connected. High pressure can damage the control causing a hazardous condition.
- 6) Make sure piping is clean and free from burrs. Apply a small amount of good quality gas-rated pipe thread compound or plumbers' tape suitable for the gas being used. Thread compound should be used sparingly on male threads only, leaving the first two threads clean.
- 7) It is recommended that a safety shut off valve is installed on either the gas in or gas outside of the valve.
- 8) It is recommended to hard pipe in the connections with unions installed inside the box.
- 9) Uncoil the pilot assembly. Be careful to not create unwanted kinks in the pilot tubing.
- 10) Feed the spade connector ends of the pilot assembly from inside the fireplace to the outside being careful not to clog the flared fitting of the pilot tube or damage the spade connectors.
- 11) Plug the spade connectors into the module according to the below wiring diagram (**Figures 37 & 38**), insert the pilot tubing into the right side of the valve and, using a wrench, tighten the nut so that the pilot tubing cannot be pulled out.

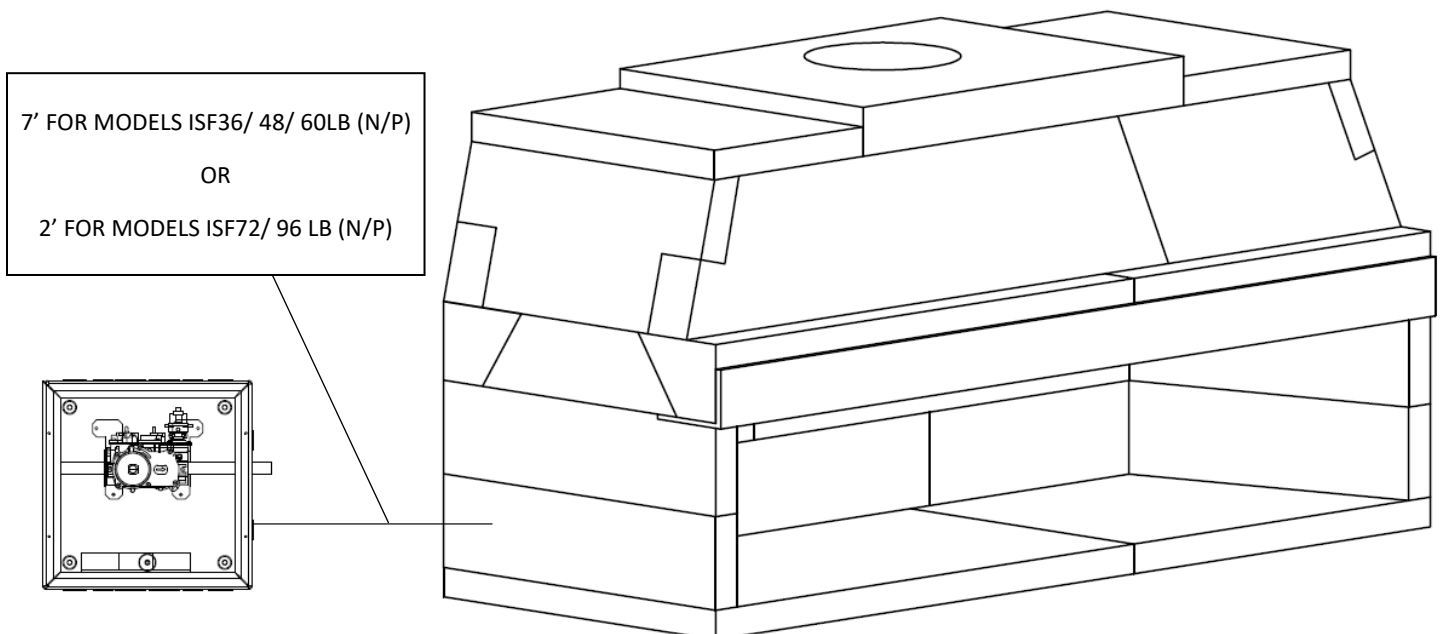


FIGURE 36

Valve Box & Burner Wiring Diagram

WARNING!!!: Do not connect 120 VAC to the control valve.

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during and pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).

The appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70. If not installed and maintained in accordance with the manufacturer’s instructions, this product could expose you to substances in fuel or fuel combustion which are known to the state of California to cause cancer, birth defects or other reproductive harm.

For a copy of the homeowner’s care and operation manual, go to www.earthcore.com or call 1-800-642-2920.

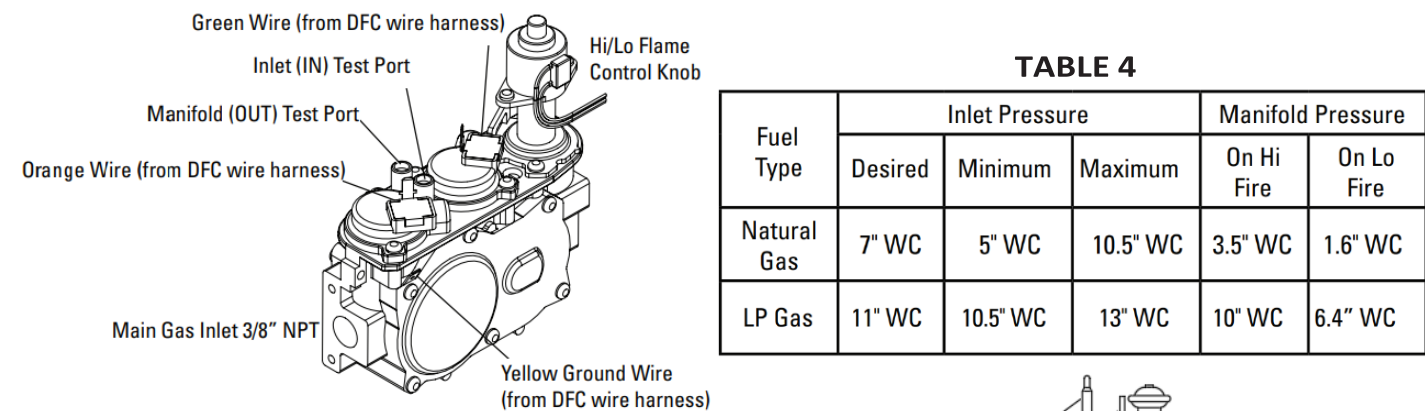


FIGURE 37

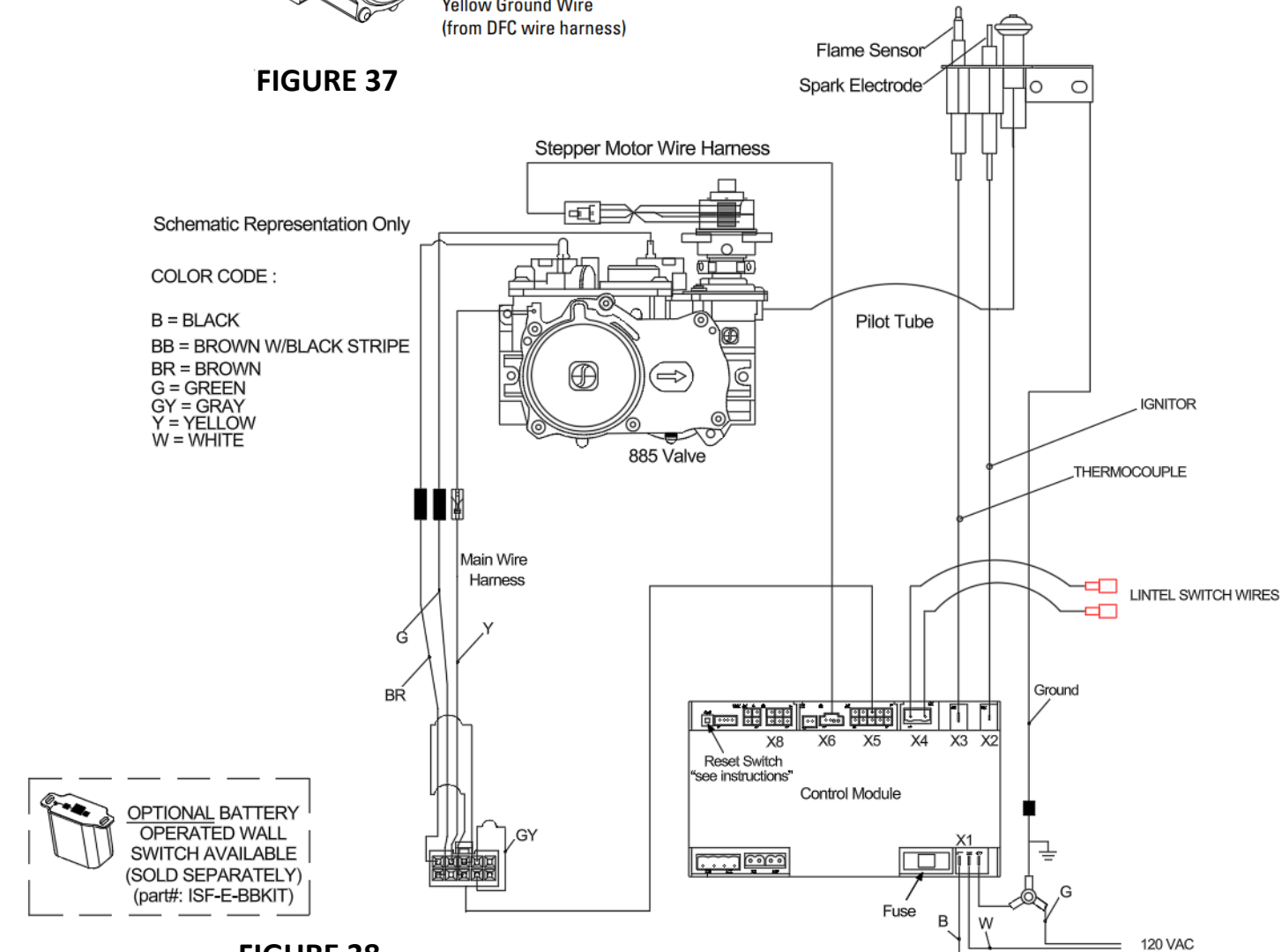
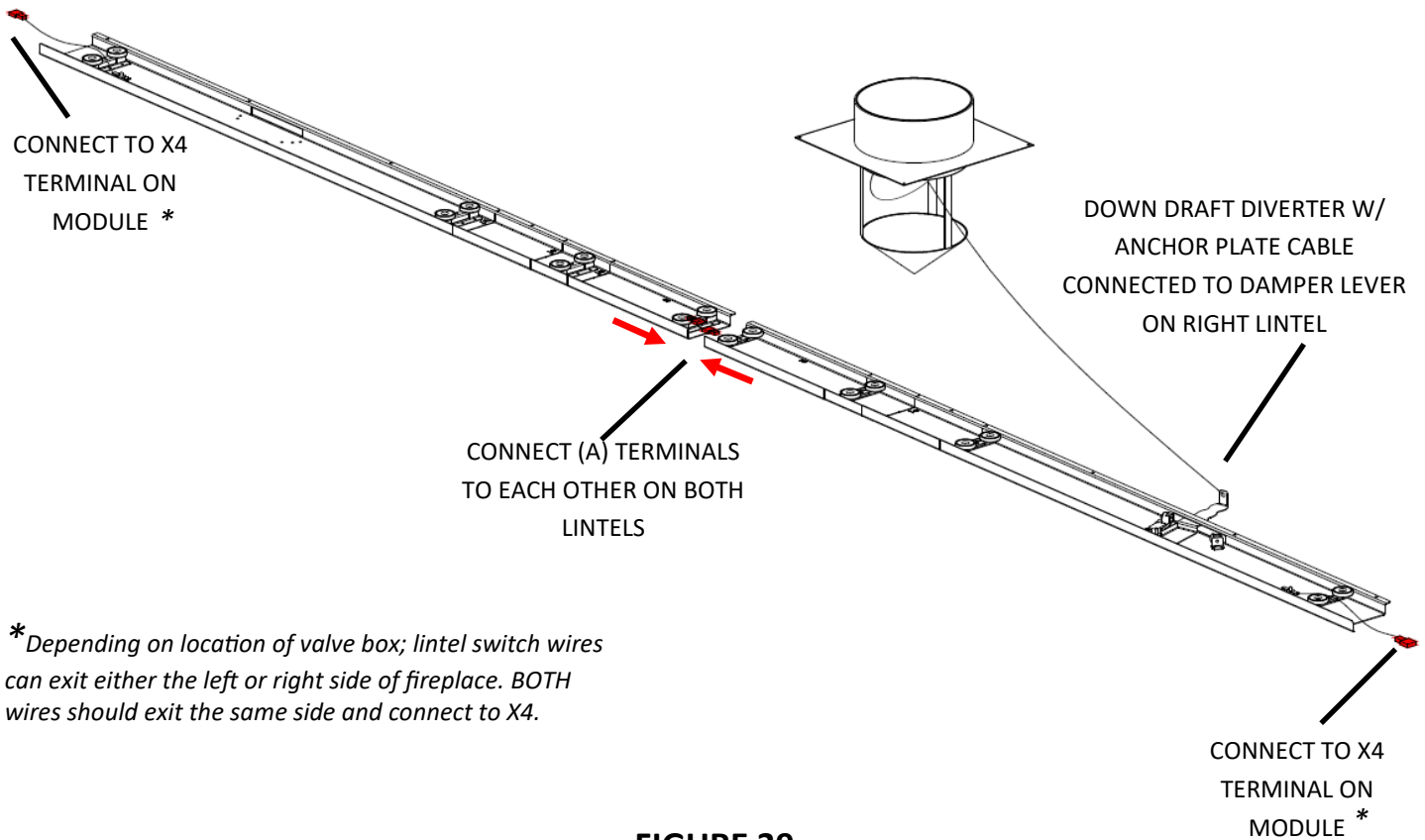


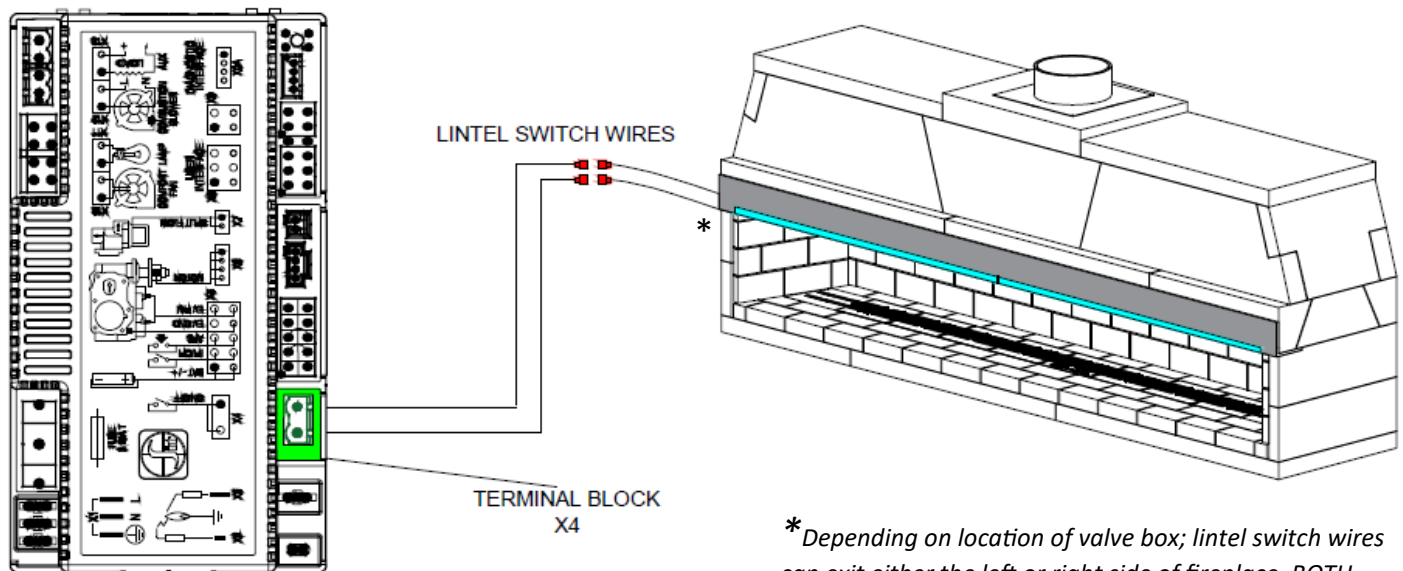
FIGURE 38

High-Temp Lintel Switch Wires and Module Connection Diagram



* Depending on location of valve box; lintel switch wires can exit either the left or right side of fireplace. BOTH wires should exit the same side and connect to X4.

FIGURE 39



* Depending on location of valve box; lintel switch wires can exit either the left or right side of fireplace. BOTH wires should exit the same side and connect to X4.

FIGURE 40

Burner Installation

IMPORTANT: Prior to installation: Shut off main gas supply to fireplace.

- 1) The ISOFLAMES Linear Burner system shall be installed by qualified professional service technician. To ensure proper performance of the appliance the owner’s installation manual must be followed carefully.
- 2) When used in the Maximus Linear Fireplace, the ISOFLAMES Linear Burner is designed to be recessed into the 2–1/2” deep firebrick cavity constructed as detailed in the “Firebrick Installation” portion of this manual (pgs. 46-47).
- 3) The burner cavity must have a height of 2-1/2”, a depth of 8-3/4”, and the length shall extend the entire length of firebox. **(Table 5; Figure 41 & 42)**
- 4) The 48”, 60”, and 72” Maximus Linear fireplaces (82L48, 82L60, and 82L72) will require the ISF36/48/60LB (respectively): Gas supply piping for these models shall terminate not less than 3” from sidewall. **(Figure 43)**
- 5) The 96” and 120” Maximus Linear fireplaces (82L96 & 82L120) will require the ISF72/96LB (respectively): Gas supply stub piping for these models shall terminate within 3” from center of the cavity. **(Figure 43)**

TABLE 5

BURNER CAVITY DIMENSIONS (in)			
Burner Model	Height	Width	Length
ISF36LB	2-1/2”	8-3/4”	FULL
ISF48LB	2-1/2”	8-3/4”	FULL
ISF60LB	2-1/2”	8-3/4”	FULL
ISF72LB	2-1/2”	8-3/4”	FULL
ISF96LB	2-1/2”	8-3/4”	FULL

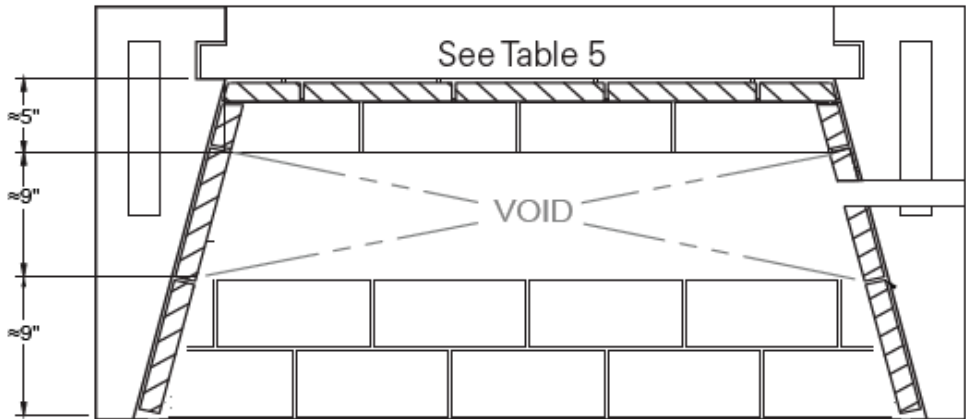


FIGURE 41

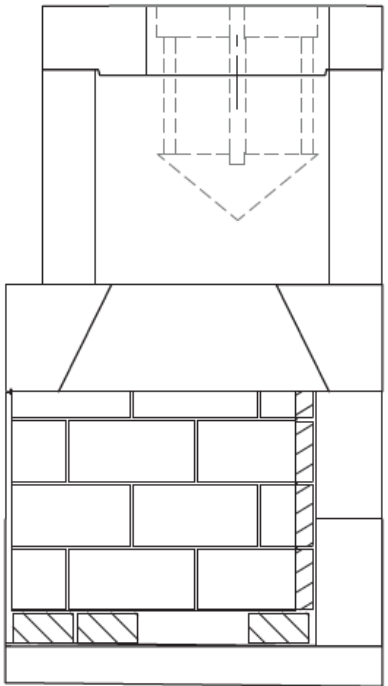


FIGURE 42

Burner Installation

- 1) Connect all burner segments according to burner model diagram Page 48-51. Make sure all connections are tightly secured.
- 2) Place burner assembly in center of fireplace floor/cavity.
- 3) Rotate the burner to position the gas inlet flared fitting to be on same side as the gas-supply stub coming from the gas valve. (Not necessary for models ISF72/96LB)
- 4) Remove the burner top closest to the gas-supply stub. Remove the top pan by unscrewing the two screws. This will allow easier access and connection of flex connector to the flared fitting. This will also be used for pilot assembly installation.
- 5) Ensure the appropriate 3/8" flared fitting is connected to the gas supply stub.
- 6) Connect the 12" flex connector to the gas inlet flared fitting on the burner assembly.
- 7) Connect the other end of 12" flex connector to the gas-supply.
- 8) Avoid creating kinks in the flex connector.
- 9) Make sure all connections are tightly secured.
- 10) Before replacing the removed burner top from **step 4**, locate the perforated rectangular section in the pan. Gently remove this section along the perforations using a screwdriver or pliers. **(Figure 44)**
- 11) Insert the pilot assembly from underneath the existing burner pan to the area of the removed burner section. **(Figure 45)**
- 12) Mount the pilot assembly to the removed burner pan using the screws provided with the pilot assembly. Be careful not to kink the pilot assembly tube as it can severely damage the pilot tube. **(Figure 46)**
- 13) Place the removed burner top back on to the orifice block and secure tightly with the pan head screws.
- 14) With gas line installed, complete burner lighting instructions on page 54 and full system initialization on page 55.

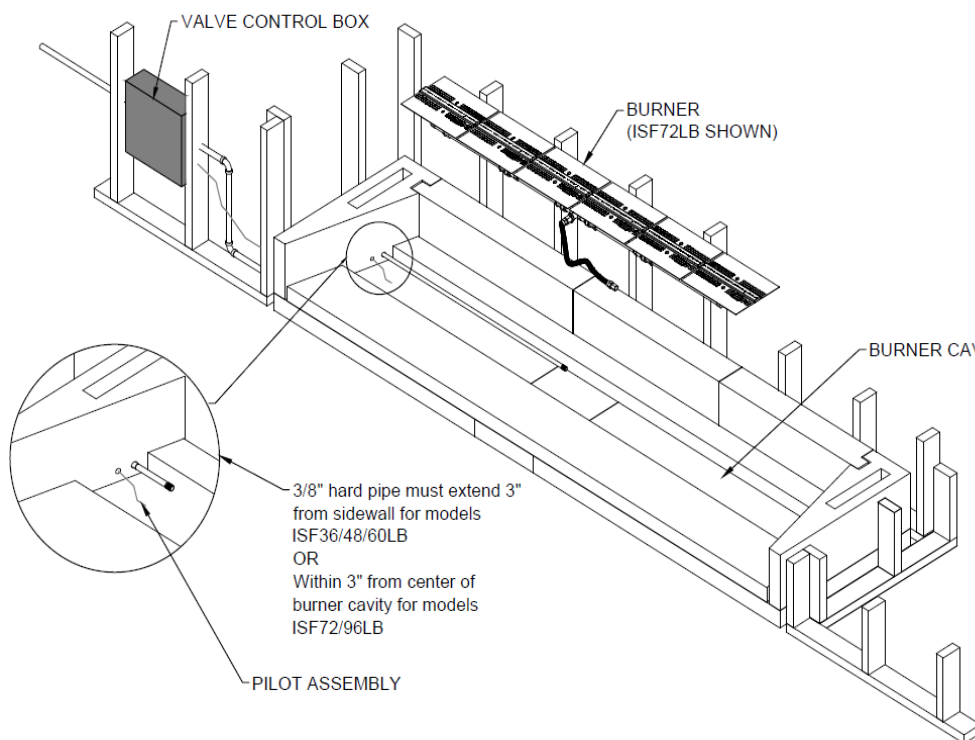


FIGURE 43

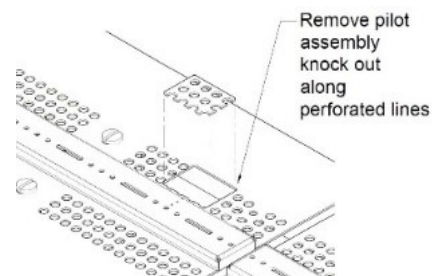


FIGURE 44

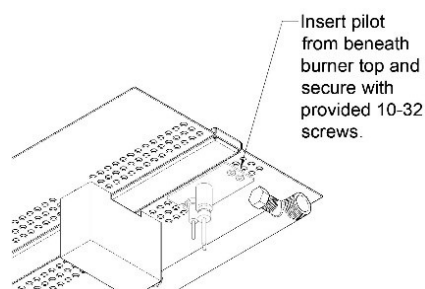


FIGURE 45

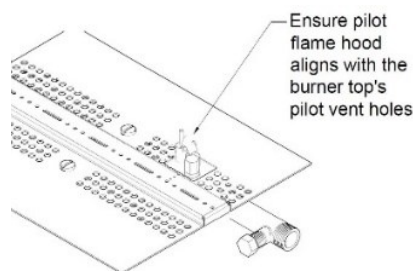
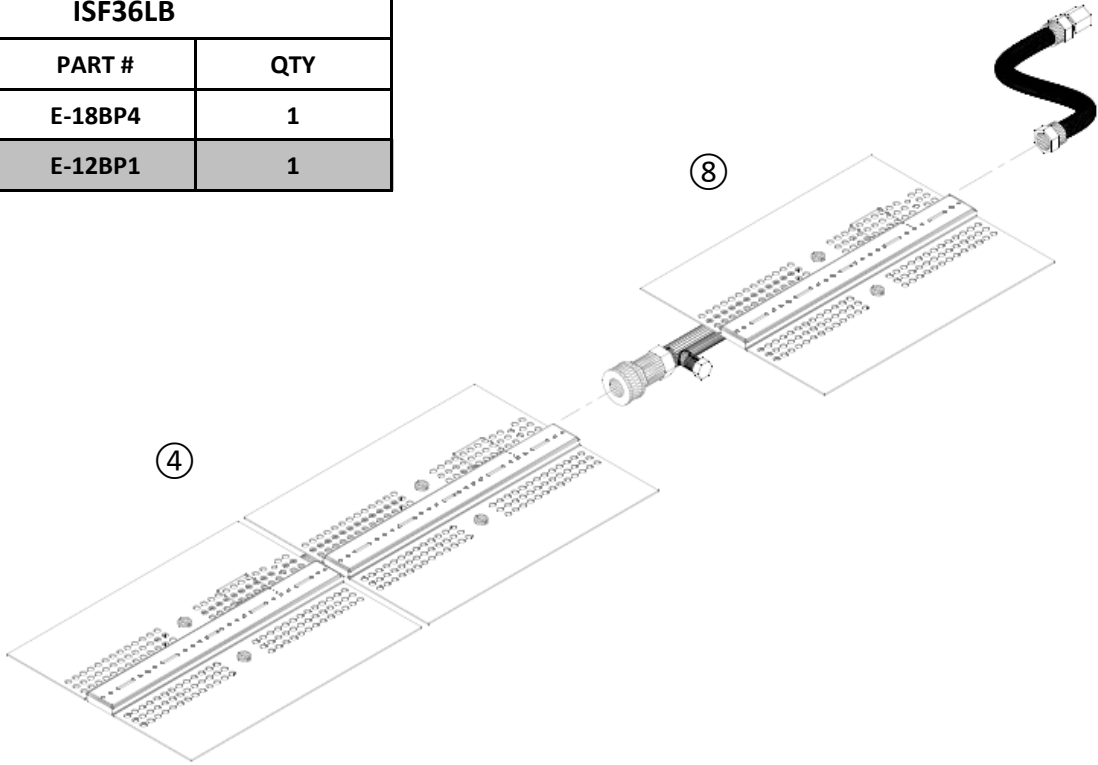


FIGURE 46

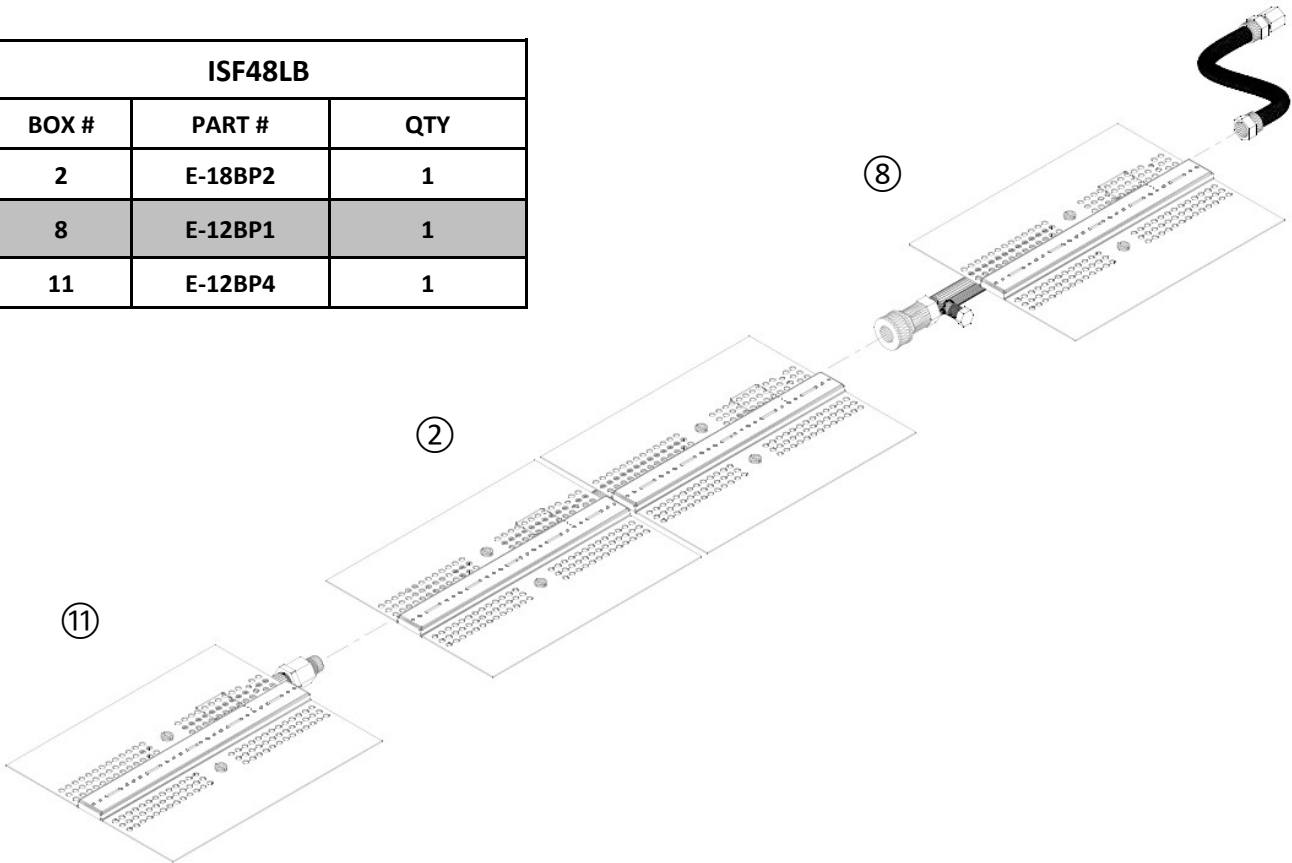
36” Burner Connection - ISF36LB
For Isokern Maximus Linear 82L48

ISF36LB		
BOX #	PART #	QTY
4	E-18BP4	1
8	E-12BP1	1



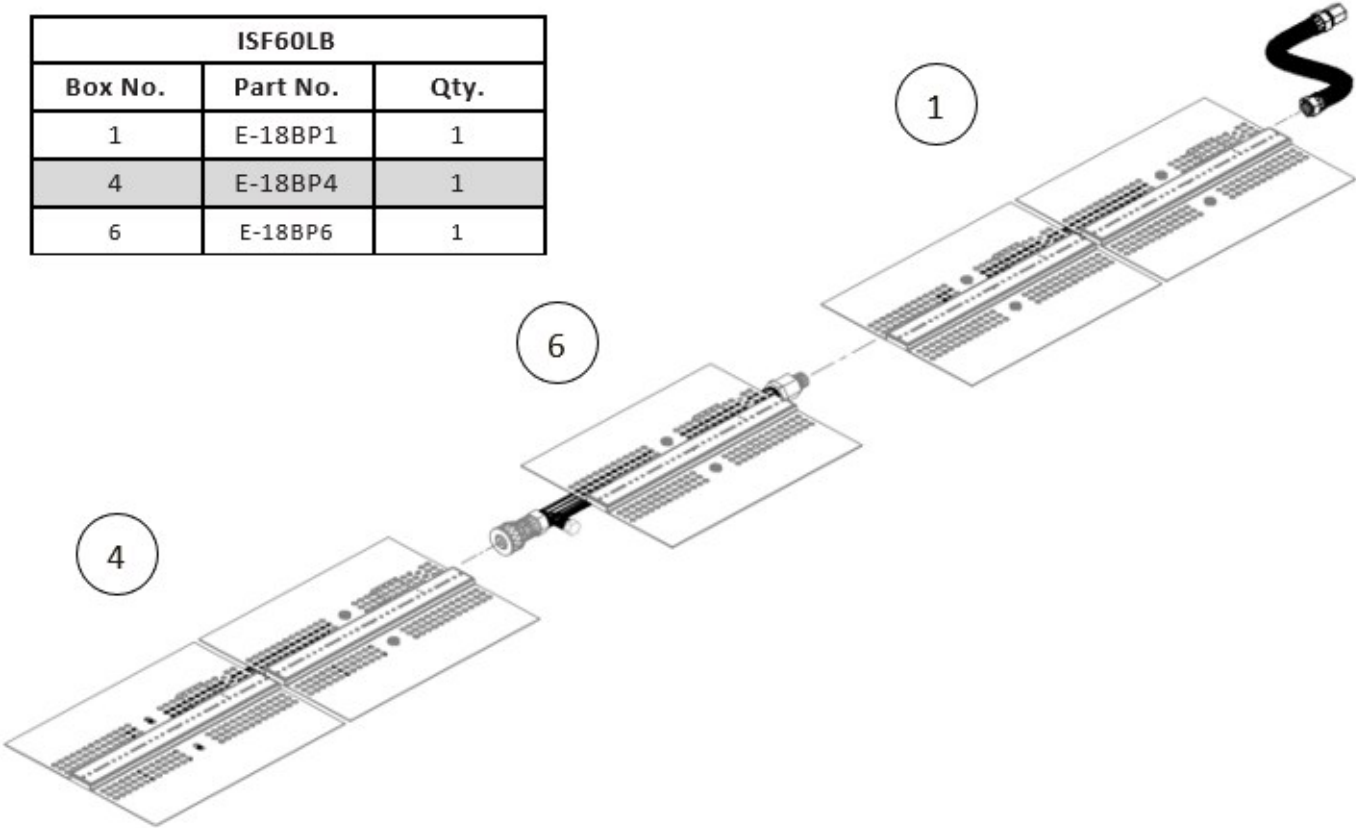
48” Burner Connection – ISF48LB
For Isokern Maximus Linear 82L60

ISF48LB		
BOX #	PART #	QTY
2	E-18BP2	1
8	E-12BP1	1
11	E-12BP4	1



60” Burner Connection - ISF60LB
For Isokern Maximus Linear 82L72

ISF60LB		
Box No.	Part No.	Qty.
1	E-18BP1	1
4	E-18BP4	1
6	E-18BP6	1



For Isokern Maximus Linear 82L96

ISF72LB		
Box No.	Part No.	Qty.
4	E-18BP4	1
5	E-18BP5	1
9	E-12BP2	1
10	E-12BP3	1
13	E-BPC	1

The diagram illustrates the assembly of the ISF72LB. It shows five main components in an exploded view:

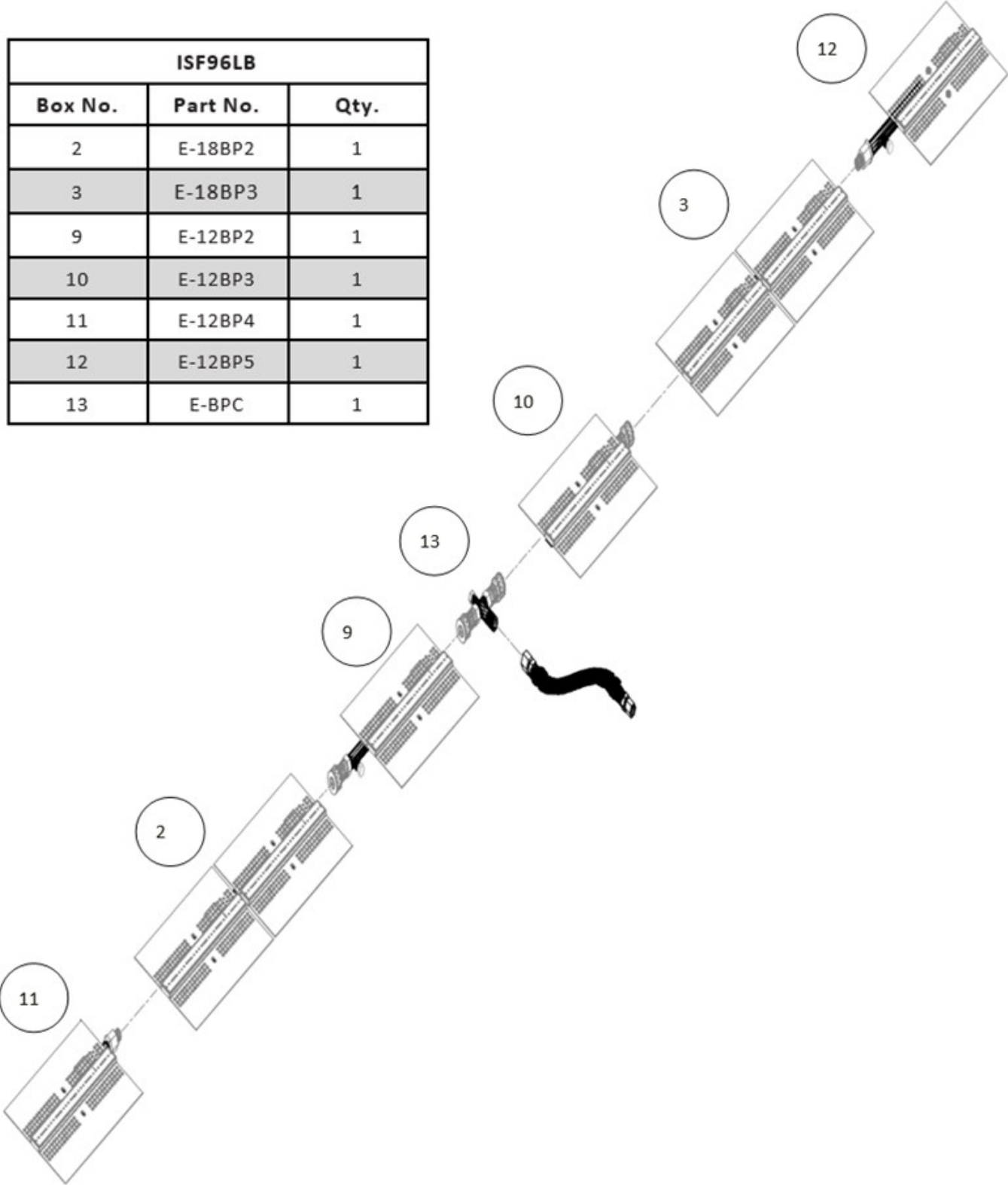
- Component 4:** A large rectangular base plate with multiple rows of pins.
- Component 5:** A smaller rectangular plate with pins, positioned above component 4.
- Component 9:** A small, dark, cylindrical component with a flange, positioned between components 4 and 5.
- Component 10:** A small, dark, cylindrical component with a flange, positioned between components 5 and 13.
- Component 13:** A small, dark, cylindrical component with a flange, positioned at the top of the assembly.

Dashed lines indicate the alignment and assembly path of the components.

96” Burner Connection – ISF96LB

For Isokern Maximus Linear 82L120

ISF96LB		
Box No.	Part No.	Qty.
2	E-18BP2	1
3	E-18BP3	1
9	E-12BP2	1
10	E-12BP3	1
11	E-12BP4	1
12	E-12BP5	1
13	E-BPC	1



Remote Control System

The Remote allows you to command the functions of your appliance from the comfort of your chair and is configured to control the On/Off primary burner operation, its flame height through six (6) levels, and provides On/Off control of the appliance.

SYNCHRONIZE REMOTE TO CONTROL MODULE FOR THE FIRST TIME

- 1) Insert the three (3) provided AAA batteries into the battery bay in the remote. Correctly align polarity (+/-).
- 2) Press the red SW1 button on the control module. The control module will beep 3 times and an amber LED is illuminated to indicate that the control module is ready to synchronize with a remote within 10 seconds.
- 3) Push the “ON” button on the remote. The control module will beep four (4) times to indicate acceptance of the remote’s command. The system is now synchronized.

TURN ON THE APPLIANCE

Press the ON/OFF Key on the Remote. The Remote LCD display will only show all active Icons on the screen and the appliance burner will turn on. A single “beep” from the module confirms reception of the command.

LOW BATTERY DETECTION

When the remote batteries are low, a “Battery” icon will appear on the LCD display of the remote (**Figure 48**) before all battery power is lost. When the batteries are replaced this icon will disappear.

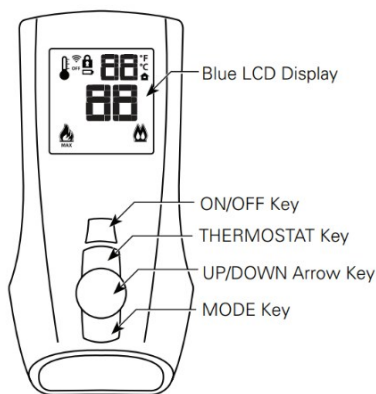


FIGURE 47

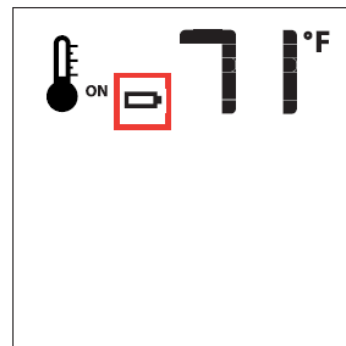


FIGURE 48

REMOTE FLAME CONTROL

The system has six (6) flame levels. See (**Figure 49**) for an example. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off. The Up-Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on, but the flame is off, the flame will come on in the high position (**Figure 49**). A single “beep” will confirm reception of the command.

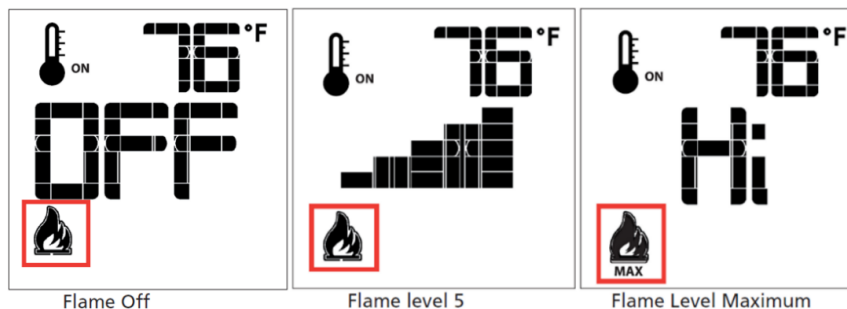


FIGURE 49

Remote Control System

TEMPERATURE INDICATOR DISPLAY

With the system in the “OFF” position, press the Thermostat Key and the Mode Key at the same time (**Figure 47**). Look at the LCD screen on the Remote to verify that a C or F is visible to the right of the Room Temperature display (**Figure 50**).

TURN OFF THE APPLIANCE

Press the ON/OFF Key on the Remote. The Remote LCD display will only show the room temperature and Icon and the appliance will turn off. A single “beep” from the Receiver confirms reception of the command.

FLAME COLOR AND BEHAVIOR

This appliance is designed for maximum heating efficiency. Therefore, upon lighting of the main burner, the flames will be semi-transparent or “bluish.” After 10- 20 minutes of operation the logs will heat up and the flames will become a yellow/orange color.

Adjusting the appliance to cause the flames to turn orange sooner may result in poor combustion, sooting and a hazardous situation. See (**Figure 51**) showing proper flame appearance.

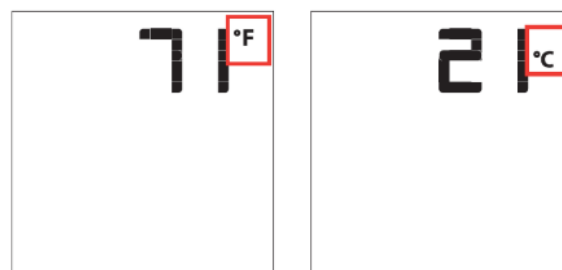


FIGURE 50

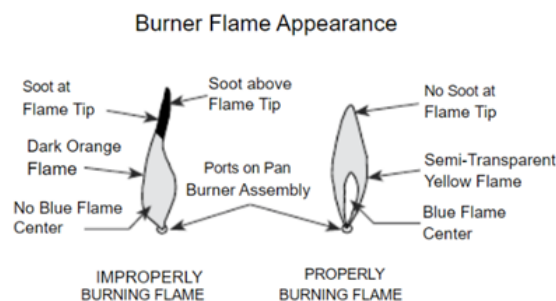


FIGURE 51

CONTINUOUS PILOT (CPI) & INTERMITTENT PILOT (IPI) SELECTION

The IPI selection is the intended setting for the appliance operation. If remote is in CPI mode, it must be returned to the IPI mode. To turn it back the remote needs to be OFF. With the system in the OFF position, press the Mode Key (**Figure 47**) once to index to the CPI mode icon. Pressing the DOWN Arrow Key will return to IPI. A single “beep” will confirm the reception of the command (**Figure 52**).

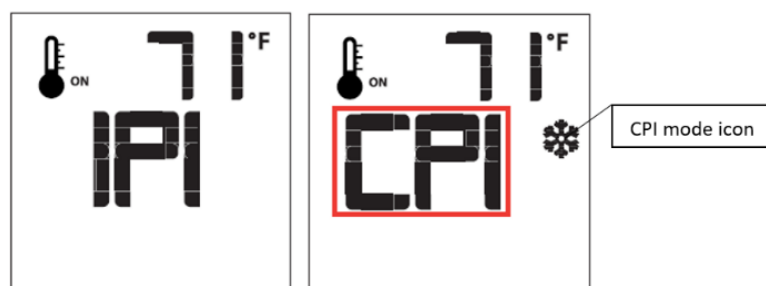


FIGURE 52

WARNING!!!: Fire hazard. Can cause severe injury or death. The receiver causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system or activating manual bypass of the remote system.

WARNING!!!: Property damage hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children cannot reach it.

Burner Lighting Instructions

INSTALLER INSTRUCTIONS

It is required that the set of safety instruction labels that have been supplied with the appliance be affixed to the operation and control points of the appliance. It is the installers responsibility to ensure these warnings are properly affixed during installation. These warning labels are a critical step in informing consumers of safe operation of this appliance.

PRE-LIGHTING CHECKLIST

Be sure to check these items before the initial lighting of the appliance:

- Gas pressure has been checked carefully.
- All gas fittings have been checked for leaks.
- All clearances to combustibles have been met.
- All combustibles materials have been removed from the area in front of the appliance.
- All vented areas of the appliance face are
- House is ventilated to clear initial paint curing odors.
- All packaging materials have been removed from the appliance.
- While appliance is cool, fingerprints or other marks have been cleaned from any plated surfaces with denatured alcohol and a soft cloth. Marks left on these surfaces may become permanent into the finish if not removed prior

WARNING!!!: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION

SAFETY INSTRUCTIONS

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do NOT try to light the pilot by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
 - **WHAT TO DO IF YOU SMELL GAS:**
 - **Do not try to light any appliance.**
 - **Do not touch any electric switch; do not use any phone in your building.**
 - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
 - **If you cannot reach your gas supplier, call the fire department.**
- C. If any portion of this appliance does not operate as the instructions indicate, do not try to repair it, call a qualified service technician. Do not use tools. Force or attempted repair may result in a fire or explosion.
- D. **Do not use this appliance if any part has been under water.** Immediately call a qualified service technician to inspect the appliance and to replace any part of the system and any gas control which has been under water.

Main Power and Remote Overview

Terminal X4 on module serves as ON/OFF switch. When the High Temp Lintel Wires are connected to Terminal X4, the REMOTE functions as a burner and pilot override switch.

Remote Lighting Instructions

Press ON/OFF on Remote transmitter. Module will beep one time to confirm. Pilot will begin to spark. It may take several minutes for air to purge from pilot tube. Once pilot is ignited, the main burner will turn on.

TO TURN OFF GAS TO APPLIANCE

1. Press the "ON/OFF" key on remote to turn off appliance operation.
2. Turn off all electric power to the appliance if service is to be performed.
3. Close the main line gas shut-off valve.

Full System Initialization

- 1) Turn ON main gas supply to appliance.
- 2) Turn ON all electrical power to appliance.
- 3) Press the ON/OFF button on remote to turn ON appliance
- 4) The burner pilot will begin sparking.
 - If pilot does not light after 30 seconds, turn off appliance for 30 seconds and retry step 2.
 - It may take several attempts to purge out all the air in pilot tube.
- 6) Once the pilot is ignited, the main burner valve will turn on within 7 seconds.
- 7) The burner should ignite, and the flames should travel along the length of the burner.
- 8) Initially, the flames will have a bluish appearance and will gradually become more yellow as appliance heats up.
- 9) After a few minutes, shut off burner by pressing OFF on the remote, allow the burner to cool to the touch.
- 10) Glass media can be spread evenly across the entire the length burner. **DO NOT** leave excessive amounts of media directly on top of burner ports. **DO NOT** obstruct pilot assembly with glass media.
- 11) Restart sequence on step 2.
- 13) System is complete.

Troubleshooting

Earthcore Industries Technical Support: 1-800-642-2920

Issue	Probable Cause	Possible Solution
No spark on pilot	No power	• Verify power is ON • Check wiring on between high temp lintel and ignition module and gas valve are correct
	Ignitor misalignment	• Verify ignitor not contacting pilot gas hood
	Loose pilot connections	• Check pilot wiring assembly is tightly secured to ignition module
Pilot won't ignite	No spark	• See "No spark on pilot"
	Air in pilot gas line	• It may take a few minutes to purge out all the air from the pilot gas tube to ignite
	No gas	• Verify pilot gas tube is threaded sufficiently to gas valve • Verify all gas connections going to and from gas valve are tight • Verify main gas-shutoff valve is in ON position
Pilot won't stay ignited	Flame sensor obstruction	• Remove any obstruction near pilot igniter and flame sensor
	Loose pilot connections	• Check pilot wiring assembly is tightly secured to ignition module
	Low gas pressure	• Verify adequate gas supply pressure
Remote won't work/ unresponsive	Range	• Remote is too far from receiver
	Batteries need replacement	• Replace batteries on remote transmitter
	Program remote to receiver	• Sync remote transmitter to ignition module; Page 52
Main burner won't ignite	Pilot won't ignite	• See "Pilot won't ignite"
	Pilot flame won't stay ignited	• See "Pilot won't stay ignited"
	Loose burner segments	• Verify burner segments are tight and secure
	Orifice blockage	• Remove burner top pan tray and visually inspect orifice gas block
	Defective valve/ignition module	• Replace gas valve or ignition module

Glass Media Options

Component	Part#	Description
	RFG-10-PB	1/2" REFLECTIVE POSEIDON BLUE FIRE GLASS (10 LB JAR)
	RFG-10-TC	1/2" REFLECTIVE TERRA COPPER FIRE GLASS (10 LB JAR)
	RFG-10-VB	1/2" REFLECTIVE VESPER BLACK FIRE GLASS (10 LB JAR)
	RFG-10-KD	1/2" REFLECTIVE KRYSTALLO DIAMOND FIRE GLASS (10 LB JAR)
	RFG-10-AD	1/2" REFLECTIVE AMBER DIAMOND FIRE GLASS (10 LB JAR)

Glass Media will be included with the Isoflames Linear Burner for each Maximus Linear Unit. A color selection will need to be chosen when ordering your fireplace unit. The following designated amount will be included for each size.

- 82L48: 3 (10lb) Jars
- 82L60: 4 (10lb) Jars
- 82L72: 5 (10lb) Jars
- 82L96: 7 (10lb) Jars
- 82L120: 9 (10lb) Jars

Registration Card

Please tear along dash lines and send to:

Earthcore Industries
ATTN: Technical Department
6899 Philipps Industrial BLVD
Jacksonville, FL 32256

Name: _____

Date of Purchase _____

Date of Installation: _____

Address: _____

City, State, and Zip _____

Phone number: _____

Fireplace Model (circle one) 82L48 82L60 82L72 82L96 82L120

Gas Type(circle one): Natural Gas LP (Propane)

Fireplace Serial Number: _____

Purchased From: _____

Address: _____

City, State, and Zip _____

Phone number: _____

Installed By: _____

Address: _____

City, State, and Zip _____

Phone number: _____

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Warranty & Disclaimer

Isokern Maximus Linear Series Gas Fireplace

ISOKERN offers a Lifetime Warranty for all Isokern components, to be free from defects in materials that negatively affect system performance from the date of purchase, subject to the terms and conditions of this limited warranty.

This warranty covers only the above stated components. THIS WARRANTY DOES NOT COVER DRAFTING, SMOKING OR PUFFING OF THE FIREPLACE SYSTEM. Factors beyond the manufacturer's control affect fireplace drafting, smoking, and puffing, and ISOKERN cannot guarantee these aspects of performance.

EXCLUSIONS AND LIMITATIONS

This Lifetime Warranty applies only if the Product is installed in the United States and Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices. This warranty is non-transferable and extends to the original owner only. The following do not carry the Lifetime Warranty but are warranted as follows:

Burner – Repair or replacement for five years from the date of installation

Gas components & electrical components – Repair or replacement for one year from the date of installation

Batteries – Replacement for 90 days from the date of installation

Logs – Replacement for five years from the date of installation against thermal breakage only Remote controls – Repair or replacement for one year from the date of installation

Parts not otherwise listed carry a 90 day warranty from the date of installation.

If a component is found to be defective under the terms of this warranty the party to whom this warranty is extended shall, notify ISOKERN, 6899 Phillips Industrial Blvd, Jacksonville, Florida 32256, in writing, by registered mail, within thirty (30) days following the discovery of the defect within the lifetime warranty period. The notice shall contain (1) the date of purchase; (2) place of purchase; (3) address of installation; (4) name, address and phone number of the owner; and (5) a brief description of the defect.

ISOKERN, or any division thereof, is not responsible for any labor costs or indirect costs incurred for the replacement of defective components.

ISOKERN is not responsible for misuse or mishandling of components. Nothing in this warranty makes ISOKERN, or any division thereof, liable in any respect for any injury or damage to the building or structure in which the fireplace or chimney system has been installed or to persons or property therein arising out of the use, misuse, or installation of properly manufactured ISOKERN product.

ISOKERN, OR ANY DIVISION THEREOF, SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THE FIREPLACES OR CHIMNEY SYSTEMS. ALL SUCH DAMAGES AND EXPENSES ARE HEREBY EXCLUDED.

This warranty is null and void when the fireplace or chimney systems are not installed pursuant to the installation instructions provided by ISOKERN or local building codes have not been followed completely.

This warranty applies only to those fireplace and chimney systems installed in the continental United States and Canada. If any part of this warranty is found to be unenforceable, the remaining parts shall remain in force and effect.

ISOKERN HEREBY DISCLAIMS ALL GUARANTEES AND WARRANTIES, EXPRESS OR IMPLIED, BEYOND THE WARRANTIES SET FORTH HEREIN.

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